

**A STUDY ON**  
**SUVETHA KUTTAM**

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(Branch V - NOI NAADAL)



**Department of Noi Naadal**  
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# INTRODUCTION

**“God Created Man in His Own Image”**

**- The Holy Bible**

So man is the wonderful creation of God .

The goal of life can be attained only by the harmonious development of sound mind in a sound body.

The siddha system of Medicine is believed to be originated in Tamil Nadu from the Lord Shiva, the supreme God of Tamils and he is considered to be the chief of siddhars.

Lord shiva taught this science to sakthi, the goddess and then to Nanthi from to common people by siddhars.

Siddhars attempt to elevate themselves to a perfected earthy immortal (attain Siddhi) by developed techniques which include

- Pranayamam (Controlled breathing)
- Dhyanam ( Concentration of mind, intense meditation )
- Karppam ( Dietary regimen) and
- Yogam (Certain postures).

The principle aim and object of siddha is to attain enlightenment for which they needed a strong body, sound mind and longer life span on pursuit of such endeavours.

They developed a science which encompassed with medicine , yoga, rejuvenation techniques alchemy and varma etc.

“சக்தி சிவமாம் இலிங்கமே தாபரஞ்  
சக்தி சிவமாம் இலிங்கமே சங்கமஞ்  
சக்தி சிவமாம் இலிங்கஞ் சதாசிவஞ்  
சக்தி சிவமாகுந் தாபரந் தானே”

- திருமந்திரம்

The shiva and shakthi are spiritual scientists. Shivam cannot exist without Shakti. Shakti cannot exist without Shivam. Shakti and Shivam are inseparable.

The universe consists of two essential entities, matter and energy, Matter cannot exist without energy and energy cannot exist without matter. The two exist are inseparable.

In Siddha medical Science, the human body's mechanism starts from the knowledge of cosmogenesis.

The nature and human beings are interrelated.

“அண்டத்திலுள்ளதே பிண்டம்  
பிண்டத்திலுள்ளதே அண்டம்  
அண்டமும் பிண்டமும் ஒன்றே  
அறிந்து தான் பார்க்கும் போதே”

- சட்டமுனி ஞானம்

Man is said to be the microcosm and the universe is macrosom what exist in the universe that exist in man.

“நிலம் தீ நீர்வளி விசும் போடைந்தும்  
கலந்த மயக்கம் உலகம் ஆதலின”

- தொல் காப்பியம்

The universe and its constituents including man are made up of five basic elements pancha boothams.

The pancha boothams are

Prithivi (land)

Appu (Water)

Theyu (Fire)

Vayu (Air)

Aagayam (Ether or space).

“ஐந்துபூ தழும்பத் தாக்கி யவைபாதி நந்நான் காக்கி  
நந்துதம் பாதி விட்டு நான்கொடு நான்கும் கூட்ட  
வந்தன தூலபூத மகாபூத மிவற்றி னின்றும்  
தந்தன நான்காந் தூல தனுவண்ட புவன போகம்.”

The ancient siddhars have considered water, fire and air alone are important elements while earth cause them and space gives them place. So they thought that air constitutes vadha in vayu while fire the pitham or azhal, Water the Iyyam or kabha. But late they modified the concept to include the other two elements also

Earth and water – Kaba

Fire – Pitha

Air and space – Vatha

Alteration in ratio of panchabootham in human body leads to vitilation of three humours. The system of siddha medicine is mainly based on the humoral theory.

The three humours namely vatha, pitha, Kabha. These humours are called by different terminologies (Viz) Malam, Thosham, Uyir thathukkal, Mukkurtam.

These three humours literally mean wind, bile, and phlegm respectively vatha, Pitha, Kapha are indefinite proportion like 1: ½ : ¼

“வழங்கிய வாதம் மாத்திரை யொன்றாகில்  
தழங்கிய பித்தம் தன்னி லரை வாசி  
அழங்குங் கபந் தானடங்கியே காலோடில்  
பிறங்கிய சீவர்க்குப் பிச கொன்றுமில்லையே”

- குணவாகடநாடி

These three humours are nourished by their respective elements present in food.

“மிகினும் குறையினும் நோய் செய்யும் நூலோர்  
வளி முதலாய் யெண்ணிய மூன்று”.

Any decrease or increase in ratio of the three humours cause disease in human body.

The sensory and motor functions of the body is based upon Ninety Six basic principles and importance of diagnosis is stated in Theraiyar Maruthava Bharatham.

In Theraiyar Maruthuva Bharatham the author defining a physician must have a clean cut knowledge about the causative factors, normal physiological conditions, pathological changes, nature of its presentation and prognosis of the disease before treat the patient.

“நோய்நாடி நோய்முதல் நாடி அதுதணிக்கும்  
வாய்நாடி வாய்ப்பச் செயல்”

Among all the forms of treatment, Noinaadal or identification of the disease and Noimuthal naadal or determination of the etiology of the disease are most important aspects.

Once the diagnosis is accurate the treatment may be easily fulfilled.

Diagnosis of the disease chiefly arrived through the Three Thodhas, Envagaithervugal and by other piniyarimuraimai.

Ancient siddhars classified the disease in to 4448. Skin diseases are included in that classification.

Skin covers all the internal organs of the body.

Diseases of the skin account for a great deal of misery, suffering, in capacity and economic loss. They are a great handicap in the society because they are visible. Fortunately, however, due to recent advances, Cutaneous scars can be successfully removed by plastic planning, laser therapy and skin grafting.

There is a popular adage that “skin patients are not cured and never die”.

The cure rate in skin diseases compares quite favourably with the cure rate in any other speciality. Only a few diseases are really contagious.

Beside, the presence of ubiquitous and tropical diseases, and the problem created by poverty and illiteracy in tropical countries, climatic factors too create special problems in the treatment of skin diseases.

10-20% of patients seeking medical advice for skin diseases.

Fast growing population, urbanization, industrialisation, agricultural development, insecticide, chemical fertilizer, poor ventilated houses all these things are responsible for the air and water pollution. These give a lot of infection to the people, particularly causing skin diseases.

Infections are more common in the tropics.

Chemical and psychogenic dermatoses are common in western countries.

Injury from the cold is well known as frostbite and chilblains. Chilblains are quite often seen in the UK but less often in other parts of Europe and the USA.

The environmental agents which can influence the skin can be categorized into

- (i) Physical agents such as trauma, friction, extremes of heat and cold, radiations especially sunlight.
- (ii) Chemical agents such as strong acids and alkali which may burn the skin or lead to irritant dermatitis as with certain chemicals from the plants or initiate allergic reactions as with most other chemicals
- (iii) Biological agents which include a variety of infecting and infesting organisms which can thrive on the skin and produce disease.



The skin has several in built mechanism for into acting with the environmental agents and most of the times, the skin is able to protect it self from these agents.

The protective ability of an individual is influenced by a variety of factors which include genetic factors, nutritional deficiencies, poor hygiene, over crowding, co existence of other disease and intake of certain drugs.

The basic facts of the skin are

- Embryologically, both the skin and brain are derived from the ectoderm.
- Close psychological relationship between the mind and skin.
- Skin is an important part of individual development behaviour and ego.
- Skin health, beauty and cosmetic are an important part of sex appeal.
- Skin is the expression of social and biological transaction in the daily life.

The author has selected **suvetha kuttam** which comes under the types of kutta roga nithanam in yugi vaithya chinthamani for dissertation work.

It is a preliminary study about the pathology of siddha system.

The author humbly contribute this work to the glory of the siddha system of pathology.

# SIDDHA PHYSIOLOGY

Human physiology is the science which explains the physical and chemical factors that are responsible for the origin development and progression of life.

The siddha system greatly explains the mechanism of human body on the basis of 96 thathuvas.

These 96 thathuvas are the structural and functional units of the body. Apart from this the body relay on.

7 Physical constituents	-	Udal thathukkal.
14 Reflexes	-	Vegangal.
6 Tastes	-	Suvaigal.
4 Body fires	-	Udal thee.

## NINETY SIX THATHUVAS

Each and every atom has 96 thathuvas. These 96 thathuvas are responsible for creation, protection and destruction of body which is mediated through the Panjapoothas theory.

According to the YUGI and SATHAGA NAADI the 96 basic factors are as follow.

### 1. BOOTHAM [ELEMENTS] – 5

#### i. Mann (Earth)

Bone, mussels and tissues represent earth in the body

#### ii. Neer (Water)

Serum, Lymph, Saliva represent water in the body

#### iii. Thee (Fire)

Digestion and circulation represent fire in the body

#### iv. Vaayu (Air)

Respration and nervous system represent air in the body

#### v. Aagayam (Ether)

It gives place to other four bootham

## **2. PORI [ORGAN] – 5**

- i. Mei (Skin) - Conveys the sensations on the basis of Air.
- ii. Vaai (Mouth) - Represent the taste on the basis of water.
- iii. Kann (Eye) - Indicates the vision on the basis of fire.
- iv. Mooku (Nose) - Indicate the smell on the basis of Earth.
- v. Sevi (Ear) - Represent the sound on the basis of Ether.

## **3. PULAN (SENSE) - 5**

- i. Ooru (Sensation)
- ii. Osai (Sound)
- iii. Ozhi (Vision)
- iv. Suvai (Taste)
- v. Naatram (Smell)

## **4. KANMENTHRIYAM (ORGANS OF PERCEPTION)**

- i. Vaai (Mouth)
- ii. Kaal (lower Limb)
- iii. Kai (Upper Limb)
- iv. Eruvaai (Anal orifice)
- v. Karuvvai (Reproductive orifice)

## **5. KANMENTHERIYA VIDAYAM (ORGANS OF ACTION)**

- i. Vasanam - Speaking
- ii. Kamanam - Wallen
- iii. Dhanan - All manoeures giving and buying.
- iv. Visarkam - Defaecation.
- v. Aanantham - Reproduction

## 6. ANTHAKARAM – 4

- i. Manam - Mind or thinking faculty
- ii. Puththi - Knowledge or power of discrimination.
- iii. Siddham - The deciding faculty
- iv. Agangaram- Achievement faculty or conception of individuality

## 7. NAADI (CHANNELS) – 10

These are subdivided into ten kinds as follows

1. Idakalai – From right big toe to the left nostrils.
2. Pinkalai – From left big toe to the right nostril.
3. Suzhumunai – Passes through both nostrils.
4. Sikuvai – To swallowing of food and water in uvula.
5. Purudan – It acts on nerve of the right eye.
6. Kaanthari – It acts on nerve of the left eye.
7. Atthi – It acts nerve of the right ear.
8. Alambudai – It acts on nerve of the left ear.
9. Sankani – It acts on nerve of the reproductive organs.
10. Gugu - It acts on nerve of the rectum.

## 8. MUKKUTRAM – 3

“வந்தகலை முன்றில் வாயுவா மபானனுடன்  
தந்த பிராணன் சமானனும் -சந்தமுறக்  
கூட்டுறவு ரேசித்தல் கூறும் வாதம் பித்தம்  
நாட்டுங் கபமேயாம் நாடு”

Kalai	Vayu	Uyirthathu	Proportion in the body
Idakali	+ Abanan	Vatham	1
Pinkalai	+ Pranan	Pitham	- 1/2
Suzhumunai	+ Samanan	Kabham	1/4
(i) Vatham (Vali)	-	10	
(ii) Pitham (Azhal)	-	5	
(iii) Kahham (Iyam)	-	5	

## **i VATHAM**

### **1. Pranan (Uyirkkal)**

It controls knowledge, mind and five objects of sense.

It is responsible for respiration and proper digestion.

### **2. Ahanan (keezh Nokkukaal)**

This is responsible for all downward movement such as passing of urine, stools, sperms, menstrual flow etc.

It carries the digested nutrients to the concerned area.

### **3. Udhanan (Mel Nokkukal)**

This is responsible for all upward visceral movements such as vomiting, nausea and complexion of the skin.

### **4. Viyanan (Paravukal)**

It is distributed throughout the body including skin. This is responsible for movements of all parts of the body and proper digestion and absorption .

### **5. Samanan (Nadukkal)**

It maintain the equilibrium between the main four forms of vali.

This is responsible for proper digestion and absorption.

### **6. Nagan**

Responsible for opening and closing of Eye lids.

### **7. Koorman**

Responsible for vision and proper digestion.

### **8. Kiruhaman**

Responsible for salivation, nasal secretion and appetite.

### **9. Thevathathan**

Responsible for laziness, sleeping and anger.

### **10. Dhananjeyan**

Produces bloating of the body after the death escapes on the 3<sup>rd</sup> day bursting.

## **(ii) PITHAM**

Anar Pitham	-	Appetite and helps digestion.
Pirasaga pitham	-	It gives complexion, shine, texture to the skin
Ranjaga pitham	-	It gives colour to the blood.
Sathaga pitham	-	Accomplishes the acts that are wished to be done.
Alosaga pitham	-	For vision.

## **(iii) KABAM**

Avalambagam	-	It lies in the stomach makes the food soft and helps digestion.
Kilethagam	-	It lies in the lungs controls the heart and other kabhams.
Pothagam	-	Present in the tongue. Responsible for the sense of taste.
Thar pagam	-	Located in the head. Keeps the eyes cool. Responsible for the colourness of both eyes.
Santhigam	-	Located in the joints. Responsible for the Lubrication and free movement of the joint.

## **9. UDAL THATHUKKAL**

They play a very important role in the nourishment and development of the body.

They take part in the biological protective mechanism and also responsible for the immune mechanism.

Saaram	-	Contains nutrients from digested food and nourishes all the tissues of the body. Responsible for growth and development Nourishes the blood.
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- Seneer (Blood) - A complex fluid centre contain organic and inorganic constituents.  
Responsible for the knowledge, strength and pallor of the body.
- Oon (Muscle) - It forms the shape of the body.
- Kozhuppu (Fat) - It lubricates the organs to facilitate frictionless function.
- Enbu (Bone) - It forms the frame and structure of the body and supports and protects the organs.  
It gives movements to the body.
- Moollai(Bone marrow)- Nourishes the bones and imparts strength
- Sukkilam (Sperm)  
or  
Suronitham (Ovam) - Responsible for reproduction

## 10. SUVAIGAL – 6

Taste is the peculiar sensation caused by the contact of soluble substance with the tongue.

Each taste is constituted by two boothas.

- Inippu (Sweet) - Mann + Neer
- Pulippu (Sour) - Mann + Thee
- Uppu (Salty) - Neer + Thee
- Kaippu (Bitter) - Vali + Vinn
- Karppu (Pungent) - Vali + Thee
- Thuvarppu (Astringent) - Vali + Mann

## 11.VEGANGAL – 14

Reflex is generally understood as pshchoneuro muscular function of the body. The natural reflex, excretion, protective and preventive mechanism are also called 14 vegangal such us.

1. Vatham - Flatus
2. Thummal - Sneezing
3. Siruneer - Micturition
4. Malam - Defecation
5. Kottavi - Yawning
6. Pasi - Hunger
7. Neervetkal - Thirst
8. Erumal - Cough
9. Ellaippu - Emaciation
- 10.Thookkam - Sleeping
- 11.Vaanthi - Vomiting
- 12.Kanneer - Lacrimation
- 13.Sukkilan - Ejaculation of sperm
- 14.Suvasam - Respiration



## SIDDHA PATHOLOGY

Pathology is scientific study of structure and functions of the body in disease.

The discipline of pathology forms a vital bridge between initial learning phase of preclinical subjects.

Siddha pathology explain that all diseases are caused by the mixture of the three cardinal humours Vadham, Pitham, Kabham and the relative proportion of those humours.

“தன்வினை புறவினை தாழினும் மிகினும்

உடலைப் பிணிக்கு முண்மையிது தாமே”

Siddha pathology deals with Mukkuttram and Piniyarimuraimai.

### Mukkuttram

The changes of the three uyir thathu are called mukkuttram. The mukkuttram is the basic principle of all diseases.

The changes in the uyir thathus are caused by

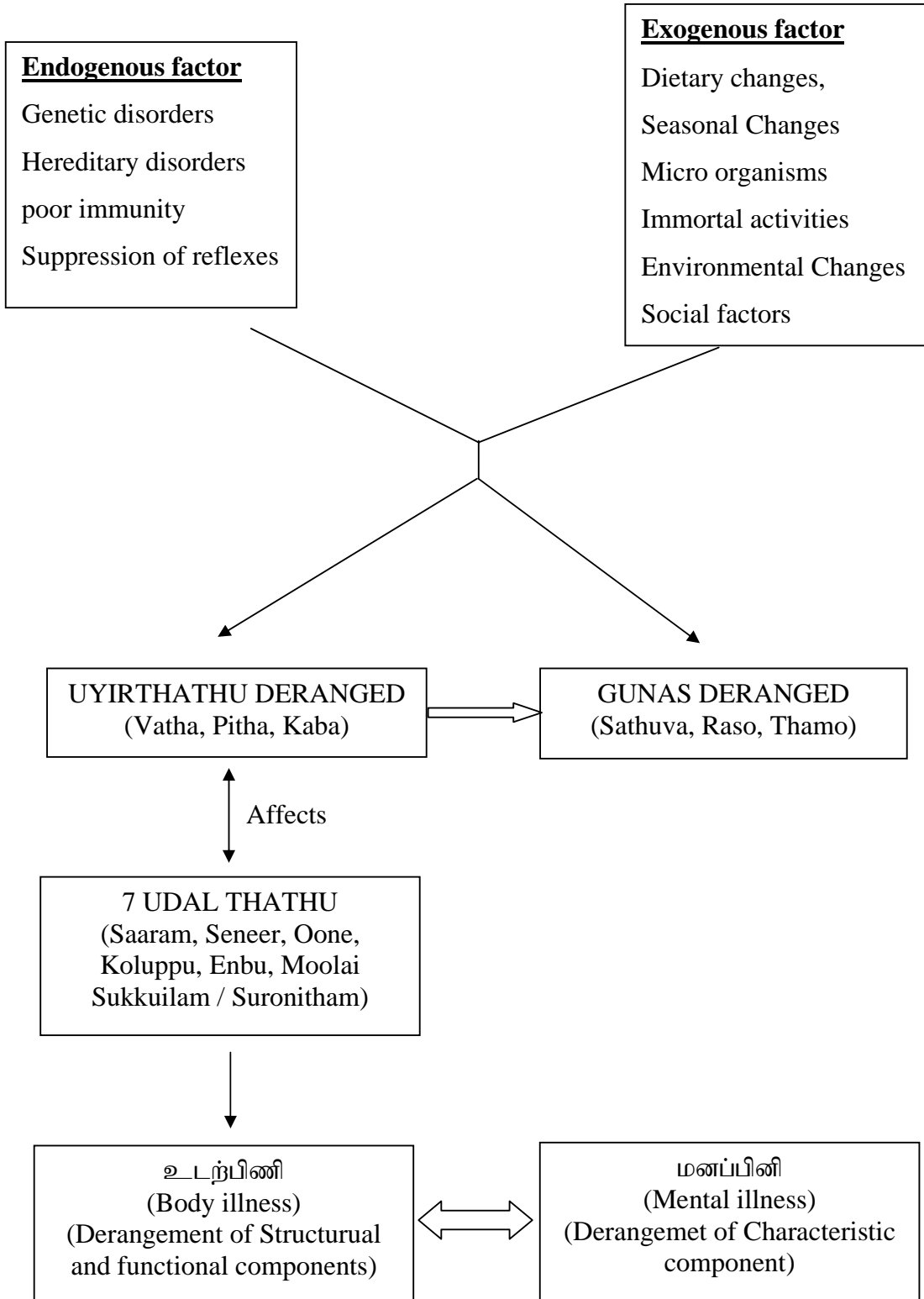
1. Variation in the intake of Diet
2. Alteration in the Udal kattugal
3. Environmental changes
  - a. Seasonal variations of humours
  - b. Regional variations of humours
4. Self suppression of fourteen vagams.

“Guest and Host Relationship between 7 thathus and Dhosas

Thathus → Denotes structural components

Dhosas → Denotes functional components

Gunas → Denotes characteristic components.



## VARIATION IN THE INTAKE OF DIET

Food comprises six suvaigal in appropriate proportion. Alterations in the normal regular diet will produce changes in the proportion of suvaigal, result in diseases.

**Inippu:-** is responsible for obesity. indigestion, diabetes, cervical adenitis, increased Kabham and its related diseases.

**Pulippu:-** is meant for body weakness, dull vision, giddiness, anaemia, dropsy, feverishness, dryness of the tongue, scabies and blusters.

**Uppu:-** is meant for aging, falling of hair, progressive weakness of the body.

**Kaippu:-** is related to vadha disorders of physical constituents.

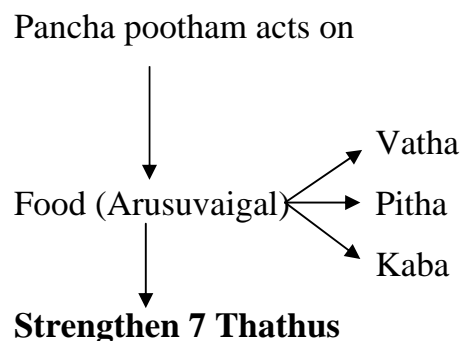
**Karppu:-** is related to excessive dryness of the tongue, defect in spermatogenesis, general malaise, lassitude, tremors, back pain.

**Thuvarppu:-** related to abdominal discomfort , heat disease, tiredness, vascular constriction and constipation.

## UDAL THATHUS

When food materials digested, they are absorbed as saaram, then the following changes will occur.

## SEVEN THATHUS



When food enters

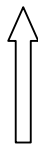
1 <sup>st</sup> day	Saram	- Plasma
	↓	
2 <sup>nd</sup> day	Seneer	- Blood
	↓	
3 <sup>rd</sup> day	Oone	- Muscular tissue
	↓	
4 <sup>th</sup> day	Koluppu	- Fat and Lymph
	↓	
5 <sup>th</sup> day	Enbu	- Bones and cartilage
	↓	
6 <sup>th</sup> day	Moolai	- Bone marrow
	↓	
7 <sup>th</sup> day	Sukilam	- Reproductive fluids

If there is any alteration in the process, first reflected in uyir thatthu as vatha diseases and associated with other two humours like pitha and kabha respectively and then affect the udal thathus respectively. (Saram, Seneer, Oone, Koluppu, Enbu, Moolai, Sukilam)

## UBNORMAL STAGE OF THREE HUMOURS

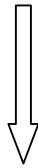
### 1. VATHAM

#### Exaggerated



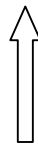
- Darkness of Motion
- Body pain
- Pricking pain
- Constipation
- Paralysed limbs
- Mental distress

**Decreased**



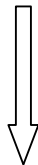
- Difficulty in work
- Impairment of intelligence
- Giddiness
- Increased Kaba symptoms

**2. PITHAM**  
**Exaggerated**



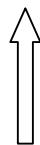
- Yellowish discolouration of skin, Urine
- Increased appetite
- Increased thirst
- Burning sensation
- Decreased sleep

**Decreased**



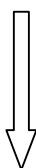
- Loss of appetite
- Cold
- Indigestion

**3. KABAM**  
**Exaggerated**



- Chills with rigor
- Pallor
- Tightness
- Cough
- Fullness of Stomach
- Excessive sleep
- Dyspnoea

**Decreased**



- Destruction of joint
- Giddiness
- Decreased Kabam in all body fluids
- Increased Sweating
- Palpitation

### SEASONAL VARIATION (PARUVAKAALAM)

S.No	Seasons	Months	Humours
1.	Kaarkaalam	Avani - purattasi Aug 16 – Oct 15	Vatham ↑↑ Pitham ↑
2.	Koothir Kaalam	Iypasi – Karthigai Oct16- Dec 15	Vatham → Pitham ↑↑
3.	Munpani Kaalam	Markazhi – Thai Dec 16 – Feb 15	Pitham →
4.	Pinpani Kaalam	Masi – Panguni Feb 16 – Apr 15	Kabam ↑
5.	Elavenir Kaalam	Chithirai – Vaikasi Apr16 – Jun 15	Kabam ↑↑
6.	Mudhuveni Kaalam	Aani – Aadi June 16 – Aug 15	Vatham ↑ Kabam →

### ENVIRONMENTAL CHANGES - IVAGAI NILAM (THINAI)

The study of five types of Nilangal is important to diagnose the disease.

S.No	Nilam	Humour Affected	Disease
1.	Kurunji	Kabam	Abdominal tumours
2.	Mullai	Pitham	Fever
3.	Marutham	All three humour are in equilibrium	Nil
4.	Neithal	Vatham	Increasing body weight Hepatomegaly Splenomegaly
5.	Palai	All three humours are affected	Genesis of Vatha, Pitha and Kaba diseases

## INHIBITION OF VEGANHAL

Self suppression of fourteen vagams cause diseases, or if they are inhibited from their normal physiologic pathway they cause diseases.

- 1. Vatham** - Chest pain, peptic ulcer, abdominal pain, bodyache, constipation, oliguria and indigestion.
- 2. Thummal** - Headache, facial pain, back pain, pain in the sense organs etc.
- 3. Siruneer** - Ulcers in the urethral orifice, joints pain, urinary tract infection etc.
- 4. Malam** - Calf muscle pain, head ache, general debility, flatulence and other diseases.
- 5. Kottavi** - Indigestion, Central tares in the face,
- 6. Pasi** - Emaciation
- 7. Neervetkai** - Constitution of the body is totally disturbed
- 8. Kasam** - Chest disorders supervene
- 9. Ilaippu** - Ulcer and other maega diseases.
- 10. Nithirai** - Heaviness of the head, eye pain, deafness, speech disturbances.
- 11. Vaanthi** - Urticaria, skin diseases, toxic manifestation anaemia, eye disease.
- 12. Kanneer** - Eye diseases, Head ache, Sinusitis and heart diseases.
- 13. Sukkilam** - Joints pain, fever, chest pain, difficulty in maturation
- 14. Swasam** - Cough, abdominal discomfort, anorexia.

## DIAGNOSTIC METHODS

Diagnosis is the mandatory process in the treatment of a patient.

Envagai thervugal which is the unique and special method having a broad and important rule in diagnosis and particular disease. It is based upon the principles of poriyalarithal and vinaathal.

Poriylarithal means understand by the five organs of perception, nose, tongue, eyes skin and the ears, pulanaalarithal means understanding by function of the sense organs of smell, taste, vision, somatic sense and sound.

Vinathal means integrating the patient, learning the history and symptoms of the disease by asking questions to the patient.

“மெய்குறி நிறம் தொனி நா விருமலம் கைக்குறி”

- தேரையர்

1. **Meikuri** (Signs) reveals that the structural and sensational changes present through out the body., i.e skin temperature (heat or cold), sweat, dryness, tenderness, swellings, nourishment etc.
2. **Niram** (Colour) reveals that any change in the colour of the skin, nails, hairs, conjunctiv, teeth, mucous membrane etc.
3. **Thoni** (Sound and speech variation) reveals the quality of the sound and the mode of speech and intelligency.
4. **Vizhi** (Eye) reveals that the systemic changes in the organs, by changes in its colours, structure of the eye and any discharge in the eye. It also reveals the proper function of the eye.



5. **Naa** (Tongue) reveals that structural changes, colour changes in the tongue, any ulceration, deviation etc.,
6. **Malam** (Faeces) The colour, amount and consistency of the faeces will reflect the pathological condition of the body.
7. **Kaikuri** (Signs in hand pulse) is nothing but the vital energy that sustains the life in our body. It has been considered for assessing that occurs in the three humours is reflected in the naadi. It serves as a good indicator of all ill health. It can be perceived by feeling it at the appropriate site.
8. **Moothiram** (Urine) the diagnostic value of urine is observed by neerkuri and Neikuri.

“நாடி ஸ்பரிசம் நாநிறம் மொழி விழி  
மலம் மூத்திரமிவை மருத்துவ ராயுதம்”

In siddha system, 8 types of diagnosis tools are followed namely.

1. Examination of pulse (நாடி)
2. Examination of touch (ஸ்பரிசம்)
3. Examination of tongue (நா)
4. Examination of complexion (நிறம்)
5. Examination of voice (மொழி)
6. Examination of eyes (விழி)
7. Examination of faeces (மலம்)
8. Examination of Urine (மூத்திரம்)

## நீர் குறி சிறப்பு

“தர்க்க சாத்திரிகளானோர்  
தங்களில் சேர்ந்து நாடி  
வர்க்கமாம் நாடி தன்னில்  
வருவது மயக்கமென்றே  
உற்றநீர் பரீட்சை ஆயந்தே  
உனரத்தனர் இதற்கு நேராய்  
மற்றொரு விதிநூல் இல்லை  
மருத்துவக் கலை வல்லோர்க்கே”

Physical findings of urine are said as,

“வந்த நீர்க் கரி எடை மணம் நுரை எஞ்சலென்  
நைந்தியலுள்ளவை யறைகுது முறையே”

Colour, quantity, odour, frothy, appearance, constituents, specific gravity of urine are physical findings.

## நெய் குறி

“பிணியுள்ளோர் நீரையேற்றும் பொழுதுமுண் வைத்த பின்னர்  
துணிவறு துரும்பி வெண்ணெய் தோய்த்தொரு துளியேவிட்டால்  
அணுகிநீர் பாம்பிற் காணின் அனிலநோய் வட்டமாயின் தணிவிலாப்  
பித்த நோயாந் தங்குமுத் தைய நோயே”

This is an uneque and special methodology progressing disease. The early morning first voided midstream urine is taken in a glass bowl. A drop of gingely oil in dropped into the urine, if the oil spreads like snake indicates vadham, spreads like a ring indicates pitham, remains floating as a peal indicates Kablam, mixed reaction of any two indicates thontham.

“அரவென நீண்டி ன.:தே வாதம்”

“ஆழி போற் பரவின் அ.:தே பித்தம்”

“முத்தொத்து நிற்கிண் மொழிவதெண் கபமே”

## **AIM AND OBJECTIVES**

Skin is one of the most important organs of the body because it protects the internal organs from the deleterious environment influences. It reflects so many internal pathological changes.

Diseases of the skin are a common occurrence. 10 – 20% of people suffering from skin diseases.

From pediatric to geriatric all age groups in both sex are affected by the skin diseases.

The etiopathogenesis of skin diseases are based on the External Environmental agents like Physical, Chemical, Biological and Internal Environmental agents like diet, mind, endocrine, metabolic, nutritional, immunological and drugs.

Siddha system is considered to be the most ancient therapeutic science in the world

Siddhars have identified four thousand four hundred and forty eight diseases and scientifically arranged eighty types of Vadha diseases, forty types of Pitha diseases twenty types of Kabha diseases and eighteen types of Kuttam etc.

Kuttam is a general term used for the group of various skin diseases.

Kuttam is classified into 18 types in yugi vaithya sinthamani.

Suvetha Kuttam is one of the eighteen types of kuttam. It is selected for the study.

The aim is to study and to evaluate the etiology and pathology of Suvetha Kuttam and to analyse the state of curability

The aim is to establish by the following objectives.

- To collect the literature about Kuttam in general and suvetha kuttam in particular.
- To evaluate the siddha basic physiology and pathology.
- To study in detail the etiological factors of suvetha kuttam.
- To analyse the signs and symptoms of suvetha kuttam.
- To find out the changes that occurs in uyir thathukkal, udal thathukkal in suvetha kuttam through envagaithervu including Naadi, Neerkuri and Neikuri.
- To study in detail about the incidence of the disease with age, sex, occupation, thinai, socioeconomic status, environment and prevalence.
- To correlate the diseases suvetha kuttam with modern aspect.
- To use the modern diagnostic parameters to confirm the disease.

## ELUCIDATION ABOUT SUVETHA KUTTAM

According to the literature yugi vaithya sinthamani **Suvetha Kuttam** has been described under kutta roga nithanam as

“தடிப்பாகத் தவளநிறம் போல்வெ ளுத்துச்  
சர்வாங்க மும்வெளுத்தாற் றான்தி ரும்பும்  
மடிப்பாக மயிர்வெளுத்தா லசாத்திய மாகும்  
வரிவுதடு உள்ளங்கை குதங்குய் யந்தான்  
நெடிப்பாக நெருப்புப் டதுபோற் புண்ணாய்  
நிறமிருந்தா லசாத்திய மென்றே யுரைக்க லாகும்  
வெடிப்பாக மெனியெலால் வெளுத்து வீங்கில்  
வெண்சுவேத குட்டமென்றே விளம்பலாமே”

பாடல் எண் 514

- யுகி வைத்திய சிந்தாமணி

**The meaning of the words in this poem.**

சுவேதம்	-	* வெண்மை - Whiteness, வியர்வை ** பாதரசம்.
தடிப்பு	-	**கண்டிப்பு - Strict, * விறைப்பு, கனப்பு, வீக்கம்
வெளுத்து	-	* வெளிருதல் - Becoming Pale, ** வெண்கையாகுதல்
சர்வம்	-	* முழுவதும் - Whole
அங்கம்	-	** இடம் - Place, * உறுப்பு - Organ, உடம்பு,

தவளநிறம் -	* சாம்பல் நிறம் - Ash Colour, Grey, ** வெண்மை நிறம், கற்பூரம்
வெளுத்தாற் -	** வெண்மையாதல் - Growing white
மடிப்பாக -	** மெதுவாக - Sluggish, சோறு, வளைந்த
வெளுத்தாற் -	* வெளிருதல் - Becoming pale
அசாத்தியம் -	* குணப்படுத்த முடியாமை - Incurability
வரிஉதடு -	** கோடுபோன்ற உதடு - Line like lips
உள்ளங்கை -	* Palm of the hand
குதம் -	*மலவாய் - Anus, Anal orifice
குய்யம் -	*ஆண்குறி / பெண்குறி - The genetal organ of male / female
நெடிப்பாக -	**நீடித்த காலமான - Chronic *நெடுநேரம், காலநீட்சி
நெருப்புபட்டது போல் -	**தீக்காய தழும்பின் நிறம், Pinkish white புண்ணாய் நிறம்
வெடிப்பாக -	**சிறப்பு - Splendous * பிளப்பு, வெடித்தல்
மேனியெலாம் -	* உடல் - Body, சரீரம்
வெளுத்து -	** வெண்மையாதல் - Growing white
வீங்கில் -	** மிகுதியாக - Abundance, அதிகரித்தல் * பெரிதாகுதல், வீக்கம்.
சுவேத குட்டம் -	* வெண் குட்டம்

[ \* Denote – T.V.Sambasivam pillai Dictionary

## **\*\* Denote – Tamil Lexicon ]**

**தடிப்பாகத் தவளநிறம் போல்வெ ளுத்துச்**

- கண்டிப்பாக சாம்பல் நிறம் போன்று வெளிநிறி
- Strictly the lesion becomes grayish white

**சர்வாங்க மும்வெளுத்தாற் றான்தி ரும்பும்**

- பாதிக்கப்பட்ட இடம் முழுவதும் வெண்மையாக மாறும்
- The whole place of the lesion turns to white

**மடிப்பாக மயிர்வெளுத்தா லசாத்திய மாகும்**

- மெதுவாக பாதிக்கப்பட்ட இடத்தில் உள்ள மயிர் வெண்மையாக மாறினால் குணப்படுத்த முடியாது
- Slowly if the hair becomes grey, it is incurable

**வரிவுதடு உள்ளங்கை குதங்குய் யந்தான்**

- கோடு போன்ற உதடு, உள்ளங்கை, மலவாயை சுற்றியுள்ள இடம், இனப்பெருக்க உறுப்பு ஆகியவைகளில்.
- The lesion present in lips, palms, anus and genital area

**நெடிப்பாக நெருப்புப் டதுபோற் புண்ணாய்**

**நிறமிருந்தா லசாத்திய மென்றே யுரைக்க லாகும்**

- நீண்ட காலமாக, தீக்காய தழும்பின் நிறமாக இருந்தால் குணப்படுத்த முடியாது
- Chronically if the lesion present like burns scar colour (Pinkish white). It is incurable

**வெடிப்பாக மெனியெலாம் வெளுத்து வீங்கில**

- சிறப்பாக வெண்மையாதல் உடல் முழுவதும் அதிகரித்து காணில்
- The pallourness spreads all over the body

வெண்சுவேத குட்டமென்றே விளம்பலாமே

- வெண்மையான வென் குட்டம் என்று கூறலாமே

- Called as suvetha Kuttam

The Yogi's lines are summarized as follows:

- ❖ Strictly the lesion is grayish white which turns white.
- ❖ Slowly if the hair becomes grey. It is incurable.
- ❖ Chronically, if the lesion present in lips, palms, anus and genital area like burns scar. It is incurable.
- ❖ Specially, when the paleness spread all over the body called as vensuvetha kuttam.



# REVIEW OF LITERATURE

## KUTTAM

According to physical and mental disabilities of human being, ancient siddha literatures classify 4448 diseases, among them the disease of kuttam are 18 types suvetha kuttam is one of them.

### SOME BASIC FACTS ABOUT KUTTAM

Kuttam was taken from the word kuttai (pond) which means accumulation.

Today, Kerala's most important part is Kuttanadu. As it includes numerous ponds it is given the name Kuttanadu.

Accumulation of water in the soil is called as Kuttai (Pond).

Changes of skin colour is called as Kuttam.

### AEOTIOLOGY

In siddha system attributes the aetiology of the skin disease to heredity, stress and strain, malnutrition and venereal exposure except those, no specific causes were mentioned for Suvetha Kuttam but general descriptions are given an extrinsic and intrinsic causes were attributed for the manifestation of Suvetha Kuttam.

The specific etiology for Kuttam involves a number of factor as narrated by various siddhars in their literary works.

#### *1) According to Yugimuni Vaidhya Sinthamani – 800*

“விளம்பவே மிகுந்தஉஷ் ணந்தன் னாலும்  
மிகுந்தசீ தளத்தாலு மழற்சி யாலும்  
வளம்பவே மந்தத்தால் வாந்தி யாலும்  
மகத்தான பெண்ணோடு மருவ லாலும்  
கிளம்பவே கிலேசங்கள் மிகுத லாலும்  
கெடியான வர்க்கங்கள் டைத லாலும்  
தளம்பவே மயிருகிர்கள் தவிடு மண்கள்  
வாதத்திற் பருக லால்மிகுங் குஷ்டம்”

“குஷ்டந்தான் பதினெட்டு வரவே தென்னிற்  
 குருநிந்தை சிவநித்தை மறையோர் நிந்தை  
 திஷ்டந்தான் தேவதையைத் தூஷணைக்கு ரோதம்  
 செப்பலாற் றிருடலாற் பரதா ரத்தை  
 அஷ்டந்தானா சையால டைக்க லத்தை  
 அபகரித்த லகதிபர தேதி தன்னை  
 வஷ்டந்தான் வைதலாற் கற்ப ழித்தல்  
 வந்திடுமே பதினெட்டுக் குஷ்டந் தானே”

“ஆச்சென்று பதினெட்டு குஷ்டந் தானும்  
 அவரவர்கள் செய்கின்ற வதர்மத் தாலாம்  
 தேச்சென்ற சிவாலவத்தி லுச்சிஷ் டங்கள்  
 செய்தவர்கள் சிவநிந்தை பண்ணி னோர்கள்  
 மூச்சென்ற பெரியோரைத் தூஷத் தோர்கள்  
 மூஸ்கரமா யடைக்கலத்தை யெடுக்கின் றோர்கள்  
 கூச்சென்ற தினையளவுங் குறைந்த கூலி  
 கொடுக்கினறோர் குஷ்டத்திற் கூடு வாரே”.

“போமென்ற பூர்வத்தின் கன்மத் தாலும்  
 புவிதனக்கு மிகுகன்மஞ் செய்த பாவம்  
 பாமென்ற பெரியோர்கள் சாபத் தாலும்  
 பாதகங்கள் மனதறிய பண்ணும் பேர்க்கும்  
 கோமென்ற குஷ்டமாம் ரோகம் வந்து  
 கூடுமென்று யுகிமுனி கூறி னேனே”. - யுகிமுனி

## 2) According to thirumoolar Karaukidai Vathiyam

“வியாதியுண் மூவாறு விளங்கிய குட்டங்கேள்  
 சுயாதிக் கிரந்தி சுழன் மேகத்தாலுறும்  
 பயாதி மண்ணுளப் பலவண்டினா லெட்டும்  
 நியாதிப் புழுநாலாய் நின்றதிக் குட்டமே”

### 3. According to Agasthiyar Kanma Kandam.

“சேர்ந்த குட்டமொரு குறைநோய்கள் வந்த  
சேதி கேள் மலராத வரும்பி கொய்தல்  
தாரிந்த ஜீவ செந்து வகைகள் செய்தல்  
தாய் தந்தை மனது நொந்து ரோகந் தானே  
தானென்ற தெய்வருத் தனையழித்தல்  
சார்வான பெரியோர்கள் தமைப் பழித்தல்  
கானென்ற நந்தவனம் பூஞ்செயல்கள் வெட்டல்  
கருமமடா சரீரத்திற் காசபோலவே  
யூனென்ற வடம்பெல்லம் மொட்டு பொட்டா  
யுடனவெழுத்து குறையோ யுதித்துஞ் சிந்தும்  
வானென்ற கருமங்கள் தீர்ப்பதற்கு  
வகையொன்று சொல்வேன் கேள்நத்த வன்னமையோ”

### 4. According to Guru Naadi Nool

“கிருமியால் வந்ததோடம் பெருகவுண்டு  
கேட்கலதின் பிரிவதனைக் கிரமமாக  
பொருமிவரும் வாயுவெல்லாங் கிரமியாலே  
புழுக்கடிபோல் காணுமது கிருமியாலே  
செருமிவரும் பவுத்திரங்கள் கிருமியாலே  
தேகமதில் சோகைக் குட்டங் கிருமியாலே  
துருமிவருஞ் சுரோணிதங் கிருமியாலே  
சூட்சமுடன் கிரிசைப்பால் தொழில் செய்வீரே”

“பயில் மொழியில் திரேகத்தில் கிருமி தானே  
பரந்து திரிகுட்டம் போல் புள்ளிகாணும்  
மயலதுவும் கிருமியுந்தா நடந்து புக்கில்  
மெளியறு சரசரன வெடித்துப் புண்ணாம்”.

5. *According to Agathiar Kaviyam*

“வியாதிகள் மூவாறுக்கும் விளங்கிய குட்டங்கேளாய்  
சயாதியா மேகத்தாலும் சூழ்கின்ற கிரந்தியாலும்  
பயாதியா மாறதாகும் பலவண்டினாலே யெட்டாம்  
யயாதியாம் புழுவானாலம் ஐயமாம் பதினெட்டாமே”

6. *In text Book of Siddha Maruthuva Noi Naadal Noi Mudhal Naadal Thirattu*

“குட்டமதுவிட கரப்பான் விடநீர்கூலை  
சுரோணிதத்தால் தாதுகெட்டுத் தடிப்புண்டாகும்  
மட்டறமே கிருமிசென்று மருவும்போது  
வகையாய் கிருமியுட விடநீர் சென்று  
குட்டமுடன் தேகமெல்லாம் பறக்கும் போது  
சூழிகுழியாய்க் கிருமியினீர்க் கொள்ளும் புள்ளி  
தட்டறவே கிருமியுட நீரால் வந்த  
சகலகுட்டம் விடகரப்பன் சாற்றலாமே”.

7. *According to Agasthiar Vaithiyam*

“சூயல்வாய் குஷ்டம் சயங்குனம் நீரிழிவு சுரக்கிராணி  
நிரடைப்பு பாண்டு மூல வாய்வு  
கயல்வாயு வருங்கண்ணில் குத்தாய் கடிந்த தசவாய்வு  
காணவாக முன் செய்த உயிர்களும் வினைதானே”

8. *According to Eighteen Siddhars Naadi Nool*

“அறிவான பித்தத்தா லெடுத்த தேகமறு  
மலிவுநிறம் வெள்ளை யரிவை யோடு  
பிரியாத சுகநிலை யற்புண்பு பெரும்  
புளிப்புணவு கொள்ளல் பெரியேர் தம்மை  
குறியாத லாசறம் பண்ணல் புத்தி  
கும்பிப்பின் தேறல் கலை ஞானபோதம்  
நெறியாதக் கற்றறிவு சொல்லல் வீரம்

நிலைப்புமதியில் கதமதி யறலமாமே”

**9. According to Dhanvanhri Vaidhiyam**

“அறிவின்றி விபரீதச் சோராகாரசம் புசிக்கலாலும்  
துறையின்றி தொடாத தென்றை தொட்டவை புசிக்கலாலும்  
குறைகொண்ட நிசித்தமான குலமங்கை யடுத்தலாலும்  
நிறை கொண்ட பெரியோர் தம்மைநிந்தித்து பேசலாலும்  
நிந்தித்து புறத்தியாற் சோமநூலை கெட பிரிக்கலாலும்  
வந்தித்து பூர்வ சென் மாந்திர பாவத்தாலும்  
சந்திக்கத் கற்புமாதர் தங்களை கருதலாலும்  
தொந்தித்த குட்டரோகந் தொடுக்கு மென்றுரைத்தோர் முன்னோர்

**10. According to Manmurugiyam**

“இடம் பொழுதுணவு தொழிலொடு பருவம்  
எனமிவை வேறுபடுதலாலும்  
நஞ்சுறல் நஞ்சுக் கடியுறு பொறும்  
பிணியுற லாறும் நிறம் பெயர்ந்திடுமே”

- கபிராச பண்புத இராமசுப்ரமணிய நாவலர்

**11. According to Guru Naadi 235**

“நல்லோர் பெரியோர்கள் நடத்துஞ் செய்கை  
நாட்டிலுள்ள துட்டஜெனம் நகைத்தாலே,  
பொல்லாத விஷக்கடிகள் வற்றுபுக்கிப்  
பொன்மையுள்ள தேகமெல்லாம் குட்டம்போலே  
செல்லாத விஷக்கடிகள் விஷகுன்மம் பாண்டு  
நீராத கன்மவினை செய்த பாவம்  
எல்லாருங் காணவிது புவியின் மீதே  
இணங்கி வந்தே கடிவிடங் கரியம்பலாமே”

## 12. According to Pararasa Sekaram

“அனைவல் வினையி னாலே மொய்த் தெழுங் குட்டரோகம்  
மைசேர் நெறியிலுய்க்க நற்றவக் குரவை மெய்மை  
மன்னிடு மன்பர் தம்மை யுதாசினம் பேசி நாளும்  
இன்னல் செய் பாத கத்தோர்க் கெய்திடு மென்னும்  
வேதமே யுரைக்கு மேலா நெறியினில் வலி நாளும்  
ஏதமே புரியுந் தீயோர்க் கெய்துவ நல்லான் மேலோர்  
சூதிய நெறியீ னின்றே யுயிர்களுக் குறுதி செய்யும்  
மாதவர் நம்மையற்றோய் வருந்த நாங் கண்டிலோமே.  
ஆனதோர் வாத பித்த சேற்பன மதனி னாலும்  
மாயனனைய விடநீராலு மங்கையர் வருத்தத்தாலும்  
ஈனமாங் கிரந்தி யாலு மிழிவுறு குட்டரோகம்  
தானமில்லாத சாகு மெனமுனி சாற்றினானே  
சாற்றிய வுணவின் பேதரு தன்னாலும் பால்நெய் வெல்லம்  
ஏற்றமா யுண்ப தாலுமிறைச்சி னதிகத் தாலும்  
கோற்றொடி மடவா ரின்பங் குறைவறத் துய்க்கையாலும்  
தோற்றிடு மலசலத்தை சுமையற யடக்கினாலும்”

The above aetiological factor can be classified as follows:-

### I. Unavathigal (Dietary Causes)

1. Intake of rice along with har chat and sand.
2. Excessive intake of fish, snail, crab, etc
3. Intake of incomplete prepared food.
4. Improper intake of food
5. Frequent excessive consumption of honey, sugar, cane juice, fish and lemon.
6. Intake of excessive oil contents.

## **II. Seyalgal (Acting of the individual)**

1. Un hygenic measures.
2. Close contact with affected persons.
3. Doing Yogic excersises immediately after intake of food.
4. Excessive sexual indulgence.
5. Hypersomnia.

## **III. Phycho Social aspects**

1. Gurunindhanai, Siva nindai, Maraiyor nindhai.
2. Irrespective speech on god and noble people with high religion attitude.
3. Karpazhithal
4. Adarmam or Kurotham.
5. Doing unwanted activites in the Sivas temple
6. Not given the correct salary of the labours
7. Prolonged mental depression
8. Inemttu to spirit
9. Guiltyness
10. Cursing by the elder

## **IV. Kalanilai Marupadu (Climate)**

1. Excessive heat or excess cold

## **V. Ganma Vinai**

## VI. Kirumigal infection

### CLASSIFICATIONS

#### 1. According to yugi chinthamani

“முத்தாகும் குட்டந்தான் பதினெட்டுக்கும்  
முனியான யுகியான் சொல்லக் கேளாய்  
பத்தாகும் புண்டரீக குட்டத்தோடு  
பொருகின்ற விர்போடகக் குட்டமாகும்  
பத்தாகும் பாமா குட்ட கர்ம குட்டம்  
பரிவான கர்ணகுட்டம் சர்மகுட்டங்  
கித்தாகுங் கிருஷ்ண குட்டம் அவதும்பர குட்டம்  
கெடினை மண்டல குட்டமாகு மென்னே  
குட்டமாம் பரிசு குட்டமோடு  
குடிலமாம் விசர்ச்சிகக் குட்டமாகும்  
வட்டமாம் விபாதிக குட்டமோடு  
மகுவராங் கிஹ குட்டந் சர்மதல குட்டந்  
திட்டாற் தத்துரு குட்டமோடு  
தாக்கான சித்மா குட்டந் சதாரு குட்டந்  
துட்டமாஞ் சுவேத குட்டந்தன் னோடொக்கச்  
சுயம்பான பதினெட்டுக் குட்டமாச்சே.”

Kuttam has been classified into 18 types. The classification are.

- |                       |   |                      |
|-----------------------|---|----------------------|
| 1. Pundareega Kuttam  | - | படர்தாமரை பெருநோய்   |
| 2. Vitchpotaka Kuttam | - | கொப்புள பெருநோய்     |
| 3. Paama Kuttam       | - | சிரங்கு பெருநோய்     |
| 4. Kaja Sarma Kuttam  | - | யானைதோல் பெருநோய்    |
| 5. Karna Kuttam       | - | காது பெருநோய்        |
| 6. Sikura Kuttam      | - | தோல் பெருநோய்        |
| 7. Krishna kuttam     | - | கருங் குட்டம்        |
| 8. Avudhaumbaram      | - | அத்திக்காய் பெருநோய் |



9. Mandala kuttam	-	வளையப் பெருநோய்
10.Abarisha kuttam	-	வலி பெருநோய்
11.Visharchika kuttam	-	சொறி குட்டம்
12.Vibathika kuttam	-	செங் குட்டம்
13.Kideepa kuttam	-	பன்றித் தோல் குட்டம்
14.Sarmathala kuttam	-	தோல் வெடி பெருநோய்
15.Thathru kuttam	-	தடிப்பு குட்டம்
16.Sithmaa kuttam	-	நா பெருநோய்
17.Satharu kuttam	-	புரை குட்டம்
18. Suvetha kuttam	-	வெண் குட்டம்

## 2. According to Dhanvanthri Vathiyam

“சொல்லுகுட்டம் ஏழுவகைபேர் சொல்லிக் கபால சர்மீகம்

வெல்லு முதும்பர மேகிடிபம் விசர்ச்சிக மண்டலக் கிரமும்

மல்லல் தருசி குவை யாகும் பெயரோ ரேழாகும்

வல்லகியாதிக் குணமதனை வகுத்துப் பாரிறுரைப்பேனே

பூண்டதத்துரு வினோடு சதாரிகம் புண்டரீகந்

தாண்டு விற்போடம் பாமாவுடன் மைதலம் வெண்குட்டம்

கூண்டிடு காகநந்தி சிற்றுமை யசல குட்டம்

வேண்டியவிவாதியோடும் பதினொன்றும் விரித்துக்கானே”

Kuttam classified into 18 types

1. Kabaala Kuttam
2. Sarmeege Kuttam
3. Udhumbara Kuttam
4. Kideeba Kuttam
5. Visarchiga Kuttam
6. Aguvai Kuttam
7. Mandala Kira Kuttam
8. Thathuru Kuttam
9. Sadharu Kuttam

### 3. T.V Sambasaivapillai Agarathi

- |                   |                        |
|-------------------|------------------------|
| 1. நீர் குட்டம்   | 10. விரல் குறை குட்டம் |
| 2. வெண் குட்டம்   | 11.சடை குட்டம்         |
| 3. சொறி குட்டம்   | 12.யாணை குட்டம்        |
| 4. கருங் குட்டம்  | 13. திமர் குட்டம்      |
| 5. பெருங் குட்டம் | 14. விரண குட்டம்       |
| 6. செங் குட்டம்   | 15. காய்க் குட்டம்     |
| 7. பொரி குட்டம்   | 16. அழிக் குட்டம்      |
| 8. விரி குட்டம்   | 17. கிருமிக் குட்டம்   |
| 9. எரி குட்டம்    | 18. ஆறாக் குட்டம்      |

### 4. According to Siddhar Aruvai Maruthuvan

These 18 types of kuttam are classified into 7 headings, they are

- |                        |   |                                                                                                                               |
|------------------------|---|-------------------------------------------------------------------------------------------------------------------------------|
| 1. Vazhi Kuttam        | - | Kabala Kuttam                                                                                                                 |
| 2. Azhal Kuttam        | - | Athikkai Kuttam                                                                                                               |
| 3. Iya Kuttam          | - | Mandala Kuttam, Sorikutham                                                                                                    |
| 4. Vazhi Azhal Kuttam- |   | Marainaakku Kuttam                                                                                                            |
| 5. Vazhi Iya Kuttam    | - | Vedippu Kuttam                                                                                                                |
| 6. Azhal Iya Kuttam    | - | Thimir Kuttam, Yanai thol Kuttam<br>Pantri thol Kuttam, Padai Kuttam,<br>Koolangal Kuttam.                                    |
| 7. Mukkutra Kuttam     | - | Thadippu Kuttam, Porai Kuttam,<br>Padarthamarai Kuttam, Erikoppula<br>kutam, Srinagu Kuttam, Pilappu<br>Kuttam, Kaaka Kuttam. |

**5. According to Thirumoolar Karukkadi vaithiym**

“வியாதியுண் மூவாறு விளங்கிய குட்டங்கேள்  
சுயாதிக் கிரந்தி சுழன் மேகத்தாலுறும்  
பயாதி மண்ணுளப் பலவண்டினா லெட்டும்  
நியாதிப் புழுநாலாய் நின்றதிக் குட்டமே”

In eighteen types of skin disorders

1. Six types are caused by kiranthi and megan
2. Eight types are caused by vandu (Paracties on earth)
3. Four types are caused by puzhu or worms. (Nunkirumi-microorganism).

**6. According to pararsa Sekaram (P.No.1113)**

”இன்பைல் வேறத் தம்மா லோதிடுங் குட்டரோகம்  
அன்னது பதினெட்டென்றே யறைந்தன ராயுள்வேத  
சொன்னவை பேத மெல்லாந் தொகுத்தவை யாந்துசேர்  
தன்னையைந் தினிற்க ருக்கித் தமிழ் முனி சாற்றினானே”  
”காற்று வெண்குட்ட மொன்று சாராகருங் குட்ட மொன்று  
தோற்று செங்குட்ட மொன்று சொறியழு கணியுமொன்று  
மாறாகும் விஷத்திலொன்று வந்திடு மைந்துஞ் செய்யும்  
ஏற்றுமாங் குணமு மேற்ற சிகிச்சையு யியம்புவோனே”

Kuttam types are

1. Venkuttam
2. Senkuttam
3. Karunkuttam
4. Azhukanni Kuttam
5. Visha Kuttam

**7. According to Athma Ratchamirtha Vaidhya Sarasankeram,**

Kuttam classified into 4 types.

1. Venkuttam
2. Senkuttam
3. Karunkuttam
4. Peru viyathi

## தீரும், தீரா நிலை

### சாத்தியம்

“குஷ்டந்தான் பதினெட்டில் சாத்தி யந்தான்  
கூறக்கேள் விற்போடக பரமம்ற் குஷ்டம்  
கிஷ்டந்தான் கேச்சர்ம் குஷ்ட மேடு  
கிருஷ்ண குஷ்டம் வுதும்பர் குஷ்டந் தானும்  
திட்டமாந் தேத்திருக் குஷ்ட மோடு  
செயசித்து மாகுஷ்டங் கிடய குஷ்டம்  
தட்டந்தான் மிகுந்தசா தாரு குஷ்டம்  
சமகிருஷ்ண குஷ்டம் சாத்தியமா மென்னே”

### அசாத்தியம்

“ஆமென்ற பத்துந்தான் சாத்ய மாகும்  
அசாத்யமது தானெட்டு அறிந்து பாரு  
போமென்ற பூர்வத்தின் கன்மத் தாலும்  
புவிதனக்கும் மிகுகன்மஞ் செய்த பாவம்  
பாமென்ற பெரியோர்கள் சாபத் தாலும்  
பாதங்கள் மனதறியப் பண்ணும் பேர்க்கும்  
கோமென்ற குஷ்டமாம் ரோகம் வந்து  
கூடமென்று யுகிமுனி கூறி னேனே”.

#### Curable – 10

1. Virpodaga Kuttam
2. Pama Kuttam
3. Kaja sarma Kuttam
4. Krishna Kuttam
5. Avuthumbara Kuttam
6. Thethru Kuttam
7. Sithma Kuttam
8. Kideepa Kuttam (ven padai)
9. Satharu Kuttam
10. Sarmathala Kuttam

#### Incurable – 8

1. Pundareega Kuttam
2. Karna Kuttam
3. Sikura Kuttam
4. Mandala Kuttam
5. Abarisa Kuttam
6. Visarchiga Kuttam
7. Vibathiga Kuttam
8. Swetha Kuttam

– Yugi Chinthamani 800,

## SUVETHA KUTTAM

Traditional concept of all siddha medicines enumerate Suvetha Kuttam is one of the eighteen kinds of kuttam.

### SYNONYMS

Venthittu

Venpulli

Venpadai

### Definition : Iyal

Discolouration of the localised skin characterised by the appearance of the white patches of irregular shape of the epidermis of skin and sometime hair also involved.

### Aetiology

Idiopathic

Chronic irritation - Rubber, Leather, Clothes.

Hormonal insufficiency

Nutritional deficiency

Defect in Melanin pigment synthesis

Sexual transimatted disease – Syphilis

### Classification

#### *According to Thanvanthri Vaithiyam*

“மீக்கெளத் தோறுமெலுமோர் முகம் வெளுக்குமாகில்

நோக்கியல் மரிக்குஞ் சொன்ன வெண்குட்டமாமே”

Normal skin colour change to white in colour.

#### *According to Sirappu maruthuvam*

1. Vatha Venpadai

2. Pitha Venpadai

3. Kapha Venpadai

4. Mega Venpadai

### **1. Vatha Venpadai**

It is characterised by the depigmented patches, which are dry rough, reddish with some what pale-black in colour.

### **2. Pitha venpadai**

It is characterized by the decolourised patches reddish in colour like lotus flower, spreading with burning sensation and loss of hairs on that area.

### **3. Kapha Venpadai**

It characterized by the depigmented patches which are deep white in colour like thumbai flower and slightly thickened. Itching present on the lesion.

### **4. Mega Venpadai**

It is due to the venereal disease, syphills within four or six months of the attack. This venpadai develops initially along the nape of the neck and the adjoining spaces. Also gradually it affects shoulder joints, back of trunk.

### **Clinical features**

Depigmented patches are small in numbers with pale in colour, around the bordering light turmeric in colour or tender dark colour is obviously marked with hyperpigmented signs. These lesions are circumscribed with 2 mm to 3 mm diameter or above. This correct picture of hypopigmented and hyper-pigmented skin in seemed to be more or less multi eyed filter (Sieve-like)

Female sex is more victimized by this mega venpadai persistently it may be in months together or in years, if not properly treated for the cause too. Therefore anti-syphilitic therapy is significant in the early period of the treatment.

### ***According to Siddhar Aruvai Maruthuvam***

Venpadai has been classified in to 3 types. On the basis of Mukkutrams , they are,

1. Vatha venpadai
2. Pitha venpadai
3. Kabha venpadai

Sings and symtoms are similar to that of sirappu maruthuvam.

### ***According to Madhava Nithanam***

A classical work “Madhava Nithanam” attributes venpadai termed as savithram, kilasam and varunam having no pathological discharge and it is classified under three thathus.

Their characteristic features are

1. Vatha Kilasam - Reddish white in colour
2. Pitha Kilasam - Red colour like lotus flower and it looks like a lotus flower.
3. Kaba Kilasam - White in colour, thickening and associated with itching.

Venpadai which affected skin named as kilasam, is having no pathological discharge and venpadai which affected muscle and adipose tissue name as savitram or varuna is also the same having no pathological discharge.

### ***Character of Venpadai***

- Skin colour will become change to reddish black or reddish white or white colour and it spread.
- The imbalance of the three thathus produces certain lesions in skin known as kuttam
- There will be an absence of perspiration and thickening of skin may produce the colour changes to skin.

### ***According to Pararasa Sekaram***

“பெறு கைலைமேவி யுற்றிடும் மலமுர்த்தி  
தெரிபெறு முனிவர்க் கற்றா ளறைந்திடு மாயுள்தேகத்  
திலுறும் போற் தன்னி லுற்றிடு குட்டரோகம்  
தெளிவுறு குணமு மேற்ற சிகிச்சையும் செப்பலுற்றாம்  
வென்குட்டம் செய்யுங் குணத்தினை சொல்ல கேண்மின்  
தெங்கலம் போலாகிப் சொறிந்திடு நீரும் பாயும்  
மென்மையாய் சாம்பல் விழும் மிழிபுலால் மிகவும் நாளும்  
தாகமாய் கபாலமென்ன வரண்டுகா திரைச்சலாமே”

- Watery discharge
- Grey colour
- Foul smelling
- Dryness of the scalp
- Tinnites

### ***According to Anubhava Vaidhya Devaragasiyam***

Venkuttam is called as a kushtam but it is different from the types of kushtam. It is not dreadful disease like kushtam.

Ven Kuttam is classified into three types :

1. Vatha ven kuttam
2. Pitha ven kuttam
3. Kabha ven kuttam
  - Skin appears glittering and rough
  - Excessive perspiration or no perspiration
  - Discolouration
  - Heat and Itching
  - Numbness in the certain parts of the body
  - The patches spreads all over the body vigorously.



### ***According to Athama Ratchmirtha Vaidhya Sarasankeragam***

- White coloured patches are present in the sole, hand, lips, scalp, fingers and wrist joint
- The lesion are circumscribed along with thickened border and gradually spread. It is known as “Venpadai”.
- Blood, muscle and adipose tissue are affected by all these venpadai.
- On the lesions discolouration of hairs, absence of normal skin texture, crumpling the adjoining normal skin area and appearance of burn scar is not curable.

### ***Curable Conditions***

1. If the lesion doesn't appear initially in the lips, palms, anal orifice and the genital organ of male and female like burns scar.
2. If the patches doesn't spreads vigorously
3. If graying of hair doesn't occur.
4. If the surface of the patch is not rough (elevated as well as punctated)
5. If it doesn't resemble like burns scar.
6. If patches doesn't appear like hair plait.

### ***Incurable Conditions***

1. If the lesion appears initially in the lips, palms, anal orifice and the genital organ of male and female like burns scar.
2. If the scar patches spreads vigorously
3. If graying of hair occurs
4. If the surface of the patch is rough (elevated as well as punctated)
5. If it resembles like burns scar.
6. If patches appear like hair plait.

# DETAILED PATHOLOGICAL VIEW OF DISSERTATION TOPIC

## SIDDHA ASPECT

The siddha aspect of pathology is based on the Mukkutra theory and Noi kanippu murai.

“வாதமாய் படைத்து பித்த வன்னியாய் காத்துச் சேத்ம  
சீதமாய்த் துடைத்துப் பாராந் தேகத்திற்குடியா மைந்து  
பூதவந்தியாமைவர் பூசை கொண்டவர் பால்விந்து”

- தேரையர் மருத்துவபாரதம்

According to Theraiyar Matruthuva Bharatham

Vatham is said to be the creative agent.

Pitham is said to be the protective agent

Kabham is said to be the destructive agent.

“வாத பித்தமைய மூன்று வன் பலத்துடனே தத்தம்  
பேதமொன்றில்லா வண்ணம் பேசியதானந் தன்னில்  
நீதியாய் நிலைத்து நிறகில் நெடும் பிணி சிக்கவில்லை”

“மெய்யளவு வாதமொன்று  
மேல் பித்த மோரரையாம்  
ஐயங் காலென்றே அறி”

## Mukkutra Theory

This include the three humours are essential constitutional factors of the humun body and they exist 1: ½ : ¼ ratio respectively in the normal body. This normal existence is responsible for the proper functioning of the body system. Any alteration in the above ratio can cause diseases.

## ALTERED MUKKUTTRAM IN SUVETHA KUTTAM

It is the basic reason that any increased or decreased in the ratio of the Vali, Azhal, Iyam cause disease in the body.

Therayar stated in his noikana mudal karanam as

“வாதமலாது மேனி கெடாது”

All the functions of the body depends upon vali kutram. Any derangement in vali kutram produce skin diseases.

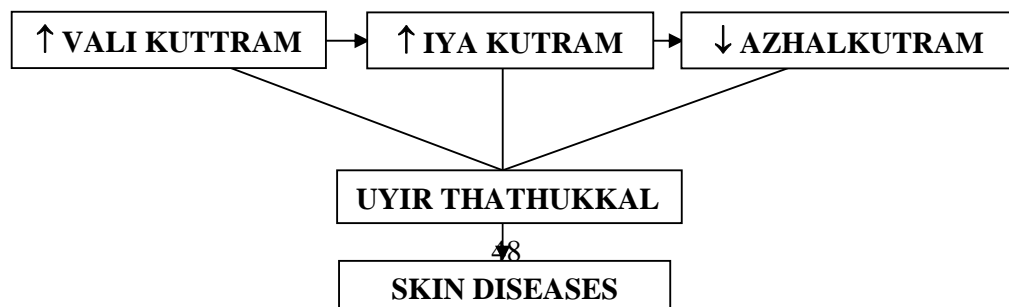
**Generally Vatham lives in Skin and hair follicles.**

**Natural properties of Vaatham: - protection and strengthening**

**of the five sensory organs**

(Ear, **Skin**, Eye, Tongue, Nose).

- ❖ In this disease, primarily Vatha kutram is increased due to diet, activity and habits.
- ❖ Secondly the increased vali kutram will increase the iya kuttram.
- ❖ The increased vali and kaba kuttram decrease the azhal kutram.
- ❖ Although three humours are affected, In later stage the Iya kutram is predominatly increased.
- ❖ The deranged mukkuttram affect the udalthathukkal



## **Vali**

- |                    |                                                                                       |
|--------------------|---------------------------------------------------------------------------------------|
| <b>Pranan</b>      | - Improper utilization of the food stuff.                                             |
| <b>Abanan</b>      | - Improper distribution of the nutrients to the concerned sites.                      |
| <b>Viyanan</b>     | - Unprotection of the body by improper distribution of the assimilated food products. |
| <b>Uthanan</b>     | - Decreased stability and strength of the body and loss of complexion of the body.    |
| <b>Samanan</b>     | - Altered equilibrium and decreased digestion and absorption.                         |
| <b>Koorman</b>     | - Weakness and defect in eye sight.                                                   |
| <b>Kirugaran</b>   | - Decreased appetite and scanty salivation                                            |
| <b>Devathathan</b> | - Sluggishness, tiredness, disturbances in sleep and giddiness.                       |

## **Iyam**

- |                    |                                       |
|--------------------|---------------------------------------|
| <b>Kilethagam</b>  | - Decreased digestion and absorption. |
| <b>Pothagam</b>    | - Decreased taste sensation           |
| <b>Avalambagam</b> | - Balancing function disturbed.       |

## **Azhal**

- |                        |                                     |
|------------------------|-------------------------------------|
| <b>Anarpitham</b>      | - Improper digestion and absorption |
| <b>Ranjagapitham</b>   | - Paleness of the body              |
| <b>Sadhaga pitham</b>  | - Not able to do the routine work   |
| <b>Alosagam</b>        | - Defect in eye sight.              |
| <b>Pirasaga pitham</b> | - Loss or lack of complexion.       |

## ALTERED UDAL KATTUKAL IN SUVETHA KUTTAM

- ↓**Saaram** - Tiredness, fatigue, depression.
- ↓**Seneer** - Pallor of the body, dryness, itching all over the body and desire to taste sour foods.
- ↓**Oon** - Weakness of the sense organ.
- ↓**Kozhuppu** - Loss of energy (loss of weight)
- ↓**Enbu** - Brittle nail, splitting hair, hair falling
- ↓**Moolai** - Giddiness.

### Inference I

MUKKUTRAM	AFFECTED
Vali ↑ed	Piranan, Abanan, Viyanan, Uthanan, Samanan, Koorman Kirukaran, Devathathan.
Iyam ↑ed	Avalempagam, Kilethagam, Pothagam
Azhal ↓ed	Anarpitham, Ranjagam, Sathagam, Alosagam, Prasagam

### Inference II

Udal Thathukkal ↓ed	Saaram, Seneer, Oon, Koluppu, Enbu, Moolai
---------------------	--------------------------------------------

## MODERN ASPECT

1) “தடிப்பாகத் தவளநிறம் போல்வெ ளுத்துச்”

- கண்டிப்பாக சாம்பல் நிறம் போன்று வெளிறி.

The lesion becomes grayish white due to **Hypopigmentation in the lesion by reduced synthesis of melanin.**

“சர்வாங்க மம்வெளுத்தாற் றான்றி ரும்பும”

- பாதிக்கப்பட்ட இடம் முழுவதும் வெண்மையாக மாறும்

The whole place of the lesion turns to white due to **depigmentation in the lesion by loss of melanin synthesis.**

“மடிப்பாக மயிர்வெளுத்தா லசாத்திய மாகும்”

- மெதுவாக பாதிக்கப்பட்ட கடத்தில் உள்ள மயிர்

வெண்நிறமாக மாறினால் குணப்படுத்த முடியாது.

The hair grows from the bottom of the follicle. It has an intracutaneous portion present in the hair follicle and the shaft. The hair follicle consists of epithelial and connective tissue components. The hair shaft is made up of an outer sheath and pigmented cortex and inner medulla.

**The hair become grey due to loss of melanin synthesis in which usually occurs as a result of disappearance of melanocytes from the hair roots.**

வரிவுதடு உள்ளங்கை குதங்குய் யந்தான்

நெடிப்பாக நெருப்புபட் டதுபோற் புண்ணாய்

நிறமிருந்தா லசாத்தியமென்றே யுரைக்க லாகும்

- உதடு, உள்ளங்கை, மலவாயை சுற்றியுள்ள இடம், இனப்பெறுக்க உறுப்பு ஆகியவைகளில் நீண்ட காலமாக தீக்காய தழும்பின் நிறமாக இருந்தால் குணப்படுத்த முடியாது.

**Chronically if the lesion present in lips, palms, anus and genital area like burns scar. It is incurable.**

# **THEORETICAL VIEW OF DISSERTATION TOPIC**

## **ANATOMY**

### **THE SKIN (OR) THE INTEGUMENT**

The skin or the integument is the external organ that covering the surface of the body and protects the deeper tissues from UV light and infection, injury

It contains the peripheral endings of many of the sensory nerves. It plays important part in the regulation of the body temperature and also has limited excretory and absorbing powers.

It consists principally of a layer of dense connective tissue, termed the dermis and an external covering of epithelium termed the epidermis which are separated by an irregular border.

#### ***Development:***

The epidermis and its appendages [hairs, nails, sebaceous and sweat glands] are developed from ectoderm, the corium or true skin is of mesodermal origin.

#### ***Epidermis:***

The epidermis, cuticle or scar skin is nonvascular, consists of stratified epithelium, and is accurately molded over the papillary layer of the dermis. It varies in thickness in different parts of the body.

The more superficial layer of epidermis is called the horny layer [Stratum Corneum] which may be separated by maceration from a deeper stratum which is called stratum mucosum.

The epidermis is composed of the following **5** layers from base to the surface.

- a) Stratum germinatum - Basal cell layer
- b) Stratum spinosum - Prickle cell layer
- c) Stratum granulosum - Granular cell layer
- d) Stratum lucidum
- e) Stratum corneum - Horny layer

### ***1. Stratum germinatum (Basal cell layer)***

It is the deepest layer, is composed of columnar or cylindrical cells. The cells of this layer undergo division by mitosis, supplying new cells to make up for the continual loss of surface layers from abrasion.

The basal cell layer consists of a single layer of keratinocytes that forms the junction between the epidermis and dermis. The superficial epidermal layers originate from the basal cell layer.

Depending upon the complexion of the individual melanocytes which are a type of dendritic cells are seen interspersed in the keratinocytes of the basal layer. Melanocytes have small nuclei with clear cytoplasm containing melanin granules and are usually spaced as every tenth cell in the basal layer.

#### ***Melanocytes***

- Pigment cells are easily distinguished from other cells because they contain brown pigment (melanin) in their cytoplasm.
- They are most abundant in connective tissue of the skin, and in the choroids and iris of the eyeball.
- Along with pigment containing epithelial cells they give the skin, the iris and the choroids their dark colour.
- Variations in the number of pigment cells, and in the amount of pigment in them accounts for differences in skin colour of different races and in different individuals.
- Many cells contain pigment in their cytoplasm but only a few are actually capable of synthesizing melanin. Such cells are called melanocytes. Melanocytes are star shaped with long branching processes.
- The remaining cells are those that have engulfed pigment released by other cells. These cells are called chromatophores or melanophores.



## ***Melanin***

Melanin is the brown black, non-haemoglobin derived pigment normally present in the hair, skin, choroid of the eye, meninges and adrenal medulla.

It is synthesised in the melanocytes and dendritic cells, both of which are present in the basal cells of the epidermis and is stored in the form of cytoplasmic granules in the phagocytic cells called the melanophores, present in the underlying dermis.

## ***Melanin distribution***

It is widely distributed in the body but peculiarity enough it is limited only to these structures which have got an exodermal origin, for skin, hair, choroids coat of retina and substantia nigra of the brain, it is formed from tyrosine by oxidative metabolism and polymerization.

### ***2. Stratum spinosum (Prickle cell layer)***

This layer is composed of several layers of polygonal prickle cells or squamous cells. The number of cells depending upon the area of the body from which the skin is taken for histologic preparations.

These cells possess intercellular bridges or tonofilaments. These intercellular cytoplasmic contain PAS positive material that is precursor of keratin.

### ***3. Stratum granulosum (Granular cell layer)***

This layer consists of **1 to 3** layers of flat cells that lie parallel with the surface. They contain numerous keratohyaline basophilic granules that stain deeply with hematoxylin (PAS negative). They are composed of keratohyalin which is a substance that apparently is transformed into keratin in more superficial layers. Granular cell layer is much thicker in palms and soles.

#### ***4. Stratum lucidum***

This layer present exclusively in palms and soles as a thin homogenous, eosinophilic non nucleate zone. Their nuclei and cell boundaries are not visible.

#### ***5. Stratum Corneum (Horny layer)***

It is composed of squamous plates of scales fused together to make the outer horny layer. These plates are the remains of the cells and contain a fibrous protein and keratin.

The most superficial layer sloughs off or desquamates. The thickness of this layer is correlated with the trauma to which as area is subjected being very thick on the palms and soles but thin over protected areas.

The stratum corneum is also normally devoid of nuclei and consists of eosinophilic layers of keratin.

### ***Dermis***

The dermis, corium, cutis vera or true skin is tough, flexible, and elastic. Its thickness varies in different parts of the body. Thus it is very thick in the palms of the hands and soles of the feet. In the eyelids scrotum and penis, it is thin.

The dermis consists of felted connective tissue with a varying amount of elastic fibers and numerous blood vessels, lymphatics and nerves. The dermis consists of two layers, a deeper or reticular layer and a superficial or papillary layer.

The specialized nerve endings present at some sites perform specific functions. Namely, pacinian corpuscles, meissner corpuscles, ruffini corpuscle, end bulbs of Krause.

Besides these structures, the dermis contains cutaneous appendages or adnexal structures. These are sweat glands, sebaceous glands, hair follicles, arrectores pilorum and nails.

# PHYSIOLOGY

## ***Functions of the skin***

### ***1. Protective function***

Skin forms the covering of all the organs of the body and protects these organs from :

- i. Bacteria and toxic substances.
- ii. Mechanical blow and
- iii. Ultraviolet rays.

#### ***i. Protection from bacteria and Toxic substances***

Skin covers the organs of the body and protects the organs from having direct contact with external, environment. Thus, it prevents the bacterial infection.

The keratinized stratum corneum of epidermis is responsible for the protective function of skin. This layer also offers resistance to the skin against toxic chemicals like acids and alkalis. If the skin is injured, infection occurs due to invasion of bacteria from external environment.

#### ***ii. Protection from Mechanical Blow***

The skin is not tightly placed over the underlying organs or tissues. It is somewhat loose and moves over the underlying subcutaneous tissues. So, the mechanical impact of any blow to the skin is not transmitted to the underlying tissues.

#### ***iii. Protection from Ultraviolet Rays***

Skin protects the body from ultraviolet rays of sunlight. Exposure to sunlight or to any other source of ultraviolet rays causes increased production of melanin pigment in skin. This absorbs ultraviolet rays. At the same time, the thickness of stratum corneum is increased. This layer also absorbs the ultraviolet rays.

## **2. Role of Skin as sense organs**

Skin is considered as the largest sense organ in the body. It has many nerve endings which are specialized to form cutaneous receptors.

These receptors are stimulated by the sensations of touch, pain, pressure and temperature, and convey these sensations through the afferent nerves to the brain. And, the perception of different sensations occur.

## **3. Storage function**

Skin can store fat, water, chloride and sugar. It can also store blood by the dilation of the blood vessels.

## **4. Synthesis of Vitamin D**

Vitamin D is synthesized in skin by the action of ultraviolet rays on cholesterol.

## **5. Excretory function**

Skin can excrete small quantities of waste materials like urea, salts and fatty substances.

## **6. Absorptive function**

Skin can absorb the fat soluble substances and some ointments.

## **7. Secretory function**

Skin secretes sweat through sweat glands and sebum through sebaceous glands. By secreting sweat, skin regulates body temperature and water balance. Sebum keeps the skin smooth and moist.

## **8. Regulation of water and electrolyte balance**

Skin regulates water balance and electrolyte balance in body by excreting water and salts through sweat.

## **9. Regulation of body temperature**

Skin plays an important role in the regulation of body temperature. Excessive heat is lost from body through skin by radiation, conduction, convection and evaporation. Sweat glands of the skin take active part in heat loss by secreting sweat. The lipid content of sebum prevents loss of heat from the body in cold environment.

## ***Colour of the skin***

The colour of the skin depends upon two important factors namely:

1. Pigmentation of skin and
2. Hemoglobin in the blood

### ***1. Pigmentation of the skin***

Cells of the skin contain a brown pigment called melanin. The cells, which synthesize this are called melanocytes. The melanocytes are present mostly in the stratum germinativum and stratum spinosum of epidermis. After synthesis, the pigment spreads to the cells of the other layers. Apart from melanin, there are some more pigments in the cells of the epidermis.

#### ***Melanin***

It is protein in nature and its synthesized from the amino acid tyrosine via dihydroxy phenyl alanine (DOPA). Skin becomes dark if the melanin content is increased.

### ***2. Hemoglobin in the blood.***

The amount and the nature of blood pigment, hemoglobin circulating in the cutaneous blood vessels play an important role in the colouration of the skin. Paleness of the skin in anemia is due to the decreased hemoglobin content. When, there is a rush of blood due to cutaneous vasodilation (blushing) the colour of the skin as in the case of cyanosis is caused by excessive amount of reduced hemoglobin.

## **PATHOLOGY**

Vitiligo is an acquired condition in which there is complete loss of melanocytes and lack of melanin synthesis in affected patches.

The melanin synthesis can be influenced by a variety of factors. Many possible causes for vitiligo have been identified.

1. Limitation of tyrosine (substrate) availability.
2. Deficiency or lack of the enzyme tyrosinase.
3. Presence of inhibitors of tyrosinase.
4. Impairment in melanin polymerization (melanin synthesis)
5. Decrease in melanosomes of melanocytes.
6. Lack of protein matrix in melanosomes.
7. Copper deficiency.
8. Increased tryptophan.
9. Increased melatonin.
10. Decreased MSH.

The enzyme tyrosinase catalyses the oxidation of tyrosine to dihydroxy phenylalanine (DOPA) in melanocytes.

Phenylalanine and tyrosine are structurally related aromatic amino acids. Phenylalanine is an essential amino acid while tyrosine is a non-essential amino acid.

The only function of phenylalanine is its conversion to tyrosine. The predominant metabolism of phenylalanine occurs through tyrosine.

For this reason ingestion of tyrosine can reduce the dietary requirement of phenylalanine. This phenomenon is referred to as sparing action of tyrosine on phenylalanine.

Tyrosine is incorporated into proteins and is involved in the synthesis of variety of biologically important compounds – epinephrine, nor epinephrine- dopamine (catecholamines), thyroid hormones and the pigment melanin.

Melanocytes possess the enzyme tyrosinase necessary for synthesis of melanin from tyrosine. Sometimes necessary for synthesis of melanin from tyrosine. Sometimes tyrosinase is present but is not active and hence no melanin pigment is visible.

The presence of tyrosinase can be detected by incubation of tissue section in the solution of dihydroxy phenyl alanine (DOPA). If the enzyme is present, dark pigment is identified in pigment cells. This test is called as DOPA reaction.

**Melanin** – Derived from the Greek word “melas” meaning black.

Melanin is an endogenous non hemoglobin derived or brown black pigment. It is the pigment of the skin, hair and eye.

### **Pigmentation of the skin**

The colour of the skin may be brown or even black according to the amount of pigment present.

Even in white races most parts of the skin contain brown pigment granules in the deepest layers of the germinative zone of the epidermis.

Dark races they are more abundant and extend throughout the whole zone.

### **Functions**

Melanin is the great protector of the skin against the sun's rays.

## ***I. Melanin Synthesis***

The synthesis of melanin occurs in melanosomes present in the melanocytes, the pigment producing cells.

Tyrosine is the precursor for melanin synthesis and only one enzyme namely tyrosinase (a copper containing enzyme) is involved in melanin synthesis.

- 1) The broad steps of melanin synthesis from the oxidation of phenylalanine or tyrosine.

Tyrosinase, a copper containing enzyme hydroxylates tyrosine to form **3, 4** dihydroxy phenyl alanine(DOPA). DOPA can act as cofactor for tyrosinase.

- 2) DOPA is converted into dopaquinone.

This reaction is catalysed by tyrosinase.

- 3) It is believed that the subsequent couple of reaction occur spontaneously forming leucodopachrome and cysteine.

- 4) Leuodopachrome is converted into **5,6** dihydroxy indole.

- 5) The oxidation of **5, 6** dihydroxy indole to indole **5, 6** quinone. This reaction is catalysed by tyrosinase. Dopa serves as a cofactor.

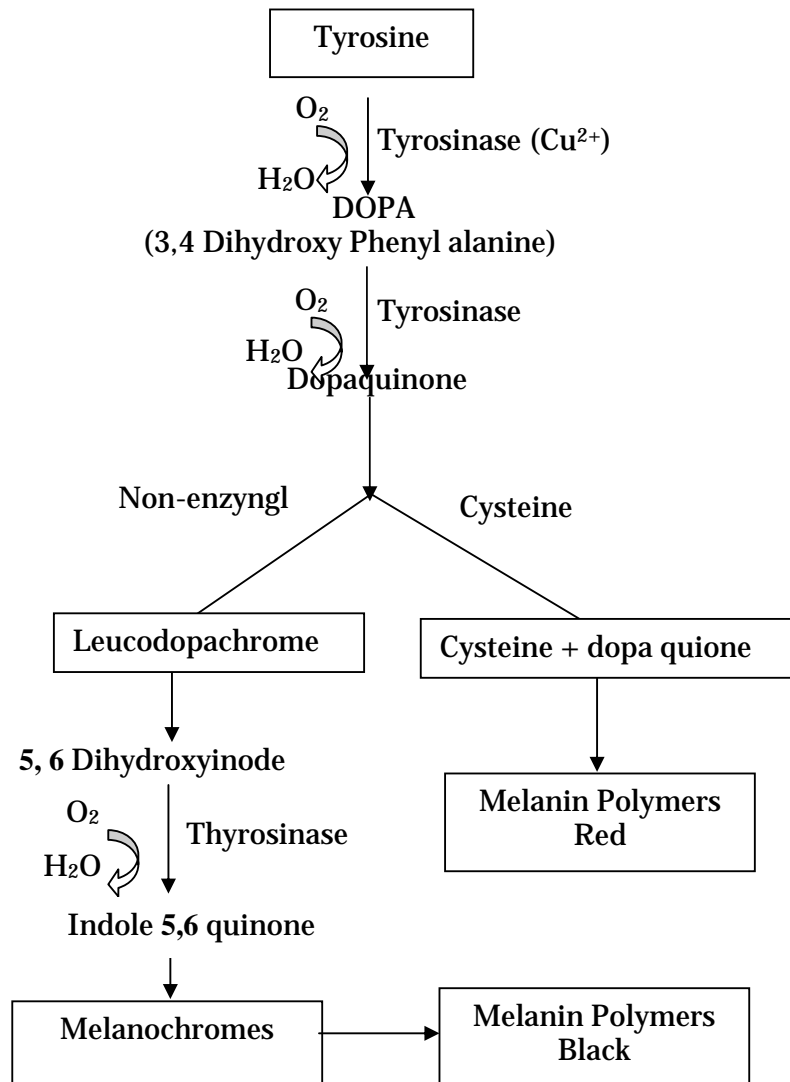
- 6) Indole **5, 6** quinone converted into Melanochrome.

- 7) Melanochrome converted into black melanin by polymerization.

- 8) Cysteine condenses with dopaquinone and in the next series of reactions results.

- 9) The synthesis of red melanin by polymerization





The skin colour of the individual is determined by the relative concentrations of black and red melanins.

This dependent on many factors, both genetic and environmental. These include

- (i) The activity of tyrosinase.
- (ii) The density of melanocytes.
- (iii) Availability of tyrosine etc.

## ***II. Tryptophan***

It is an essential amino acid. It contains an indole ring. Chemically it is  $\alpha$  amino  $\beta$  indole propionic acid. It is a precursor for the synthesis of important compounds namely  $\text{NAD}^+$  and  $\text{NADP}^+$  (Coenzymes of nearin) serotonin and melatonin

### **MELATONIN**

Melatonin is a hormone, mostly synthesized by the pineal gland. It inhibits tyrosinase thus interfering in pigment formation.

#### **Source of secretion**

Melatonin is secreted by the parenchymal cells of pineal gland.

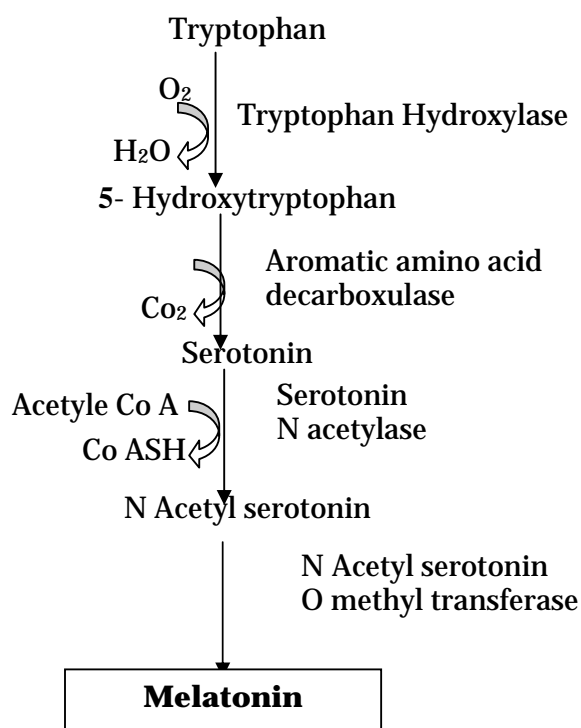
#### **Chemistry**

Melatonin is an indole N acetyl – 5 methoxy tryptamine

#### **Function**

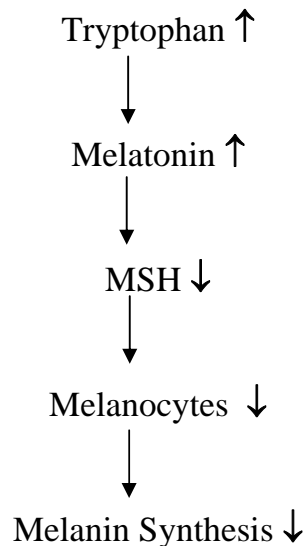
Melatonin lightens the colour of the skin of certain animals like frogs and fish. It blocks the action of MSH and ACTH.

#### **Melatonin synthesis**



Melatonin inhibits the production of melanocytes stimulating hormone (MSH)

If melatonin increased, the production of MSH decreased, melanin synthesis in melanocytes decreased.



### ***III. Melanin stimulating hormone***

The middle lobe of the pituitary secretes hormone, originally known as intermedin or melanocyte stimulating hormone (MSH).

Melanin formation in both human and amphibian skin is augmented by the hormone known as intermedian or melanocyte – stimulating hormone (MSH) secreted by the pars intermedia of the pituitary gland.

MSH promotes the synthesis of skin pigment melanin and disperses melanin granules that ultimately leads to darkening of the skin.

Two types of MSH,  $\alpha$  MHS and  $\beta$  MSH. The similarity in structure between MSH ACTH explains the mild but definite melanophore expanding activity of ACTH.

MSH increased the serum copper level. This is accompanied by inner case in the melanin formation.

**MSH ↑ Melanocyte ↓ → Melanin Synthesis ↓**

#### ***IV. ACTH***

Aderocorticotrophic hormone (ACTH) secreted by anterior pituitary has melanocyte – stimulating activity similar to MSH although to a much lower degree.

In Addison's disease ACTH is secreted in a large amount and there is brownish black pigmentation of the exposed parts of the skin like hands, feet and mucous membrane.

**ACTH↓ → MSH↓ → Melanocytes↓ → Melanin synthesis ↓**

#### ***V. Copper***

The body contains about 100 mg copper distributed in different organs.

##### ***Biochemical function***

- 1) Copper is an essential constituent of the enzyme tyrosinase.
- 2) Copper is necessary for the synthesis of haemoglobin (Cu is a constituent of ALA synthetase, needed for hemo synthesis)
- 3) Ceruloplasmin serves as ferroxidase and is involved in the conversion of iron from  $\text{Fe}^{2+}$  to  $\text{Fe}^{3+}$  in which form iron is transported in plasma.
- 4) Copper is necessary for the synthesis of melanin and phospholipids.
- 5) Hemocyanin a copper protein complex in invertebrates functions like hemoglobin for  $\text{O}_2$  transport.

***Dietary requirements :*** Adults – **2 - 3** mg/day,

Infants and children – **0.5 - 2** mg/day

***Sources :*** Liver, Kidney, Meat, Egg yolk, Cereals, Nuts, and Green Leafy vegetables.

##### ***Absorption***

- About 10% of dietary copper is absorbed, mainly in the duodenum.
- Metallothionein is a transport protein that facilitates copper absorption.
- Phytate, zinc and molybdenum decrease copper uptake.

## VITILIGO

The name '**vitiligo**' is derived from the latin word Victim meaning a blemish (spoil the beauty of).

**White skin** is the literal meaning of **leucoderma**, being derived from the greek words, leucas and dermis. **Leucas** means white and **dermis** means skin.

Celeus was the first Roman physician of the 2<sup>nd</sup> century to coin the word vitiligo, because the disease resembles the white patches of a spotted calf (vitelus).

### **Definition:**

Vitiligo is a disorder of the skin especially due to loss of pigment without any disturbances and textural alterations.

A condition due to failure of melanin formation in the skin produced sharply demarcated, milky white patches with hyperpigmented borders.

Vitiligo is characterized by the presence of non-pigmented areas of irregular shape, which develop on the epidermis of skin and hair. In this condition there is **absence or deficiency of melanin**, a dark pigment of the skin produced by melanocytes under the stimulation of the sun light and the control of a melanin stimulating hormone of the hypophysis.

It is due vitiligo is due to some derangement in the pigment metabolism resulting in appearance of white patches in the skin. It is hard to say whether the site of derangement is usually general or local, but the main affected part is the skin, which is the most exposed part of the body. It can be examined by naked eye and can furnish a lot of information about the person and the disease.

**History:**

Vitiligo is known to the medical word from time immemorial. It is mentioned in tarikh-e-tibb-e-Iran. (Persian History of Medicine) vol.I by Dr. Mohmood najmabadi, that the disease vitiligo was known in the period of Aushorrians in 2200 B.C. The description of vitiligo is also found in Athervanaveda which was written in 1400 B.C. First in 1914, Danial Turner, dermatologist, described this skin disorder. In 1868 Addison defined this as a non-infiltrated one.

**Epidemiology:**

Vitiligo is an acquired depigmentary condition. Though worldwide in distribution, it is most common in India, Egypt, and other tropical countries.

Vitiligo has assumed epidemic proportions in several parts of India especially Gujarat and Rajasthan. It affects 1% of all races. It is a source of great social embarrassment to dark-skinned people.

It affects all age groups with no predilection to either sex. Many cases starts at the ages of five, fifteen and at menopause.

**Gross anatomical changes in vitiligo:**

Vitiligo represents an acquired patchy loss of pigments of the skin. There are no gross changes seen except irregularly demarcated depigmented patches of varying size, usually surrounded by hyper pigmented skin. These are seen distributed symmetrically or asymmetrically at various parts of the body.

**Histopathological Changes In Vitiligo:**

Marked histological changes do not occur in cases of vitiligo. All the layers of the epidermis and dermis, appear normal except a few changes where can be seen after special stains.

In the affected area the basal cells and the keratinizing cells of the other layers of epidermis do not contain melanin pigment granules in them.

The contrast can be seen at a junction of the normal and vitiliginous areas of the skin, specially by silver staining of DOPA reaction.

The pigment cells, the melanocytes are not seen in the affected area but they are present in the adjacent normal skin. At the border of the patches of vitiligo the melanocytes often appear large and posses long dendritic process filled with melanin granules. Electron microscopic studies confirm the absence of melanocytes in areas of long standing vitiligo.

There are collections of mononuclear cells at dermo epidermal junction at the border between vitilligineous and normal skin. These cells are predominately small lymphocytes.

### **Melanin :**

Melanin - meaning black.

Melanin is an endogenous non haemoglobin derived or brown black pigment (formed). When the enzyme tyrosinase catalyses the oxidation of tyrosin to dihydroxy phenylalanine (DOPA) in melanocytes. Melanin synthesis occur in this way.

### **Aetiology - Vitligo :**

- ❖ Melanocytes in areas of depigmented skin are destroyed and the cause is unknown Anti- melanocytic anti- bodies directed against intra cellular components of melanocytes have been shown.
- ❖ The presence organ specific auto immune disease occurs in about 10% of patients. Such conditions are more common in their families than in a normal population.
- ❖ A neurogenic defect has been postulated for the rare dermatomal pattern of vitiligo which affects principally the limbs.
- ❖ There is a positive family history of the disorders in those with generalized vitiligo and tuis type is associated with autoimmino disease such as diabetes, thyroid adrenal disorders and pernecioys anemia.

- ❖ Genetic predisposition is an important, its influence varies from 10 to 35%.
- ❖ Auto-immunity has been blamed but in reality, it is a reaction pattern to drugs infections and toxin but not a cause for whole melanocyte system is defective.

**Important known causative factors are :**

- ♣ Nutritional - defects in copper, proteins and vitamins in diet, digestive upsets like amoebiasis, helminthes, chronic diarrhoea, dysentery etc.,
- ♣ Endocrines -Association with thyrotoxicosis and diabetes.
- ♣ Trophoneurosis and autonomic in balance - emotional stress and strain.
- ♣ Infections and toxic products, Enteric fever ill health, focal sepsis.
- ♣ Drugs and chemicals - like quinones, guano furacin, amyphenol, chlorthiazide broad spectrum antibiotics and chenoguin.

Chemicals are known to inhibit melanogenesis, enzymatic actions and several chain biochemical reactions. They can also cause interference with nutrition of the tissues.

Hence tie up of the two chemicals and nutrition may provide the answer role of food adultrants, industrial chemicals and dyes, contaminating water and foods may be guess work at this stage but may prove to be the ultimate causes.

**Hereditary Factors :**

Hereditary disorders are caused by defective genes which are transmitted from one generation to the other. Depending upon the mode of inheritance of the same disease in other members of the family. The clinical manifestation as a rule, appear early in life, but these may be delayed if the patient can effectively compensate the defect.

Hereditary is one of the factors of vitiligo

Familiar incidence has been reported in 7.5 to 21% in India and 33 to 40% in western countries.



### **Psychology of Vitiligo patients :**

A few basic facts regarding the disease as follows, are known to be responsible for the precipitation and aggravation of this disorder.

- 1) The disease vitiligo attaches a social stigma.
- 2) Inferiority complex immediately following the start of disease, the patient thinks himself inferior to others. Naturally, at the beginning the individual tries to hide the patches of lesion and when fails in this effort, the individual often fights shy of friends and relatives as far as possible.
- 3) Idea of reference whenever they sees persons talking at a distance, they thinks it is definitely about them and their disease, which is not generally fact.
- 4) Depression when they feel disease is incurable and they becomes gradually depressed and it may even lead to suicide.
- 5) **Psychosis** : As the patient tries to fight shy of the surrounding environment, they may gradually feel more and more lonely and withdrawn, ultimately plunging into a psychic state.
- 6) **Anxiety**: As the disease spreads it may give rise to a state of acute anxiety and insomnia, mixed with depression.
- 7) **Aggression (or) Sublimation**: The patient may either develop a disbelief in God and mankind and become aggressive in his/her interpersonal behaviour. The patient may give way to sublimation and resort to leading a religious life as a possible escape from his / her own reality.

In Behl's practice of Dermatology, it is shortly described. A defect in enzyme tyrosinase is held responsible for vitiligo. According to some, melatonin a substance secreted at nerve endings inhibits tyrosinase, thus interfering in pigment formation. DOPA staining shows that melanocytes are deficient. In active cases mononuclear hugging at the junction of the lesion and normal skin is a prominent feature.

**Allergy History:**

1. Occupation
2. Cosmetic things
3. Diet
4. During bathing – the powder of Bengal gram and green gram or any other herbal products can be used.
5. If anyone above is the reason for allergy it must be avoided.
6. Vinegar, cooking soda and food enriched with alcohol must be avoided. These items may promote bleaching of skin pigment.
7. Using soaps and detergents also promote bleaching the skin.
8. Copper and zinc content vegetable and drugs tablet such as cooked green- gram or Bengal gram at least one time a day.
9. The role of copper in skin pigmentation can be well understood in terms of necessity copper for tyrosinase activity. Loss of pigments has been reported in acute zinc deficiency. Also reported in vitiliginous skin, zinc and copper contents are decreased.
10. Venpadaai is also commonly seen on the flanks of ladies pressure is presumed to lead to depigmentation.
11. Loss of melanin pigment from the skin often occurs, following wound healing scar formation commonly lead to depigmentation.
12. Irritant cosmetic things allergy. ex Rubber slipper, gloves etc.  
Monobenzyl either of hydroquinone – present in the slipper, gloves or other articles of rubber irritate the skin and produce depigmentating disorder.

**Clinical Features :**

- 1) Patches of skin lose their pigment and become perfectly white, though no other changes take place and no scaling .
- 2) Vitiligo may occur in either sex and at any age.
- 3) The white patches may appear on any part of the skin but commonest on the face and neck, hands and wrist, lower abdomen and thighs and may be precipitated by trauma.
- 4) They may be of any size or shape and are usually though not always, roughly symmetrical.
- 5) They slowly increase in size until large areas of the skin are completely decolorised.
- 6) When vitiligo occurs on a hairy area such as eyebrows or pubis the hair on the white patch may become white also.
- 7) The depigmented areas are sometimes surrounded by an excess of pigmentation in the immediately adjoining skin but this appearance is often an illusion and the result of visual contrast.
- 8) Vitiligo is most noticeable in the summer when the normal skin is tanned by the sun. The white areas having no protection pigment are easily made red and sore by exposure to sun or artificial ultraviolet light.
- 9) Vitiligo sometimes disappears spontaneously after months or years more usually the conditions spreads slowly and may involve nearly the whole of the skin.
- 10) At times lesions develop along the distribution of a peripheral nerve, zosteriform vitiligo. It is interesting sometimes to see a bunch of hair burning in that area of skin.
- 11) The onset is slow and the course insidious. It may continue to increase slowly or come to a halt, and then increase again.
- 12) Haemoglobin content of the blood is low.

## **Clinical criteria for classification of vitiligo :**

### **Stage of Clinical feature of vitiligo**

Active (V1)	i) New lesions developing. ii) Lesions increasing in size. iii) Border ill defined.
Quiescent/	i) No new lesions developing.
Stable (V2)	ii) Lesion stationary in size. iii) Border hyperpigmented and well-defined.
Improving (V2)	i) Lesions decreasing in size. ii) No new lesions developing. iii) Border defined and signs of spontaneous repigmentation (follicular and peripheral)
Zosteriformis / Segmental	i) Unilateral distribution of lesions, preferably along the course of nerves.

Besides typing the stage of disease, it is useful to decide the variety (Acral, Vulgaris, Zosteriform), Severity (Localised or extensive) and acuity (insidious or galloping) of Vitiligo.

### **Diagnosis :**

- 1) The distribution, the age of onset and the hyperpigmented border will suggest the diagnosis.
- 2) It is usually apparent. In doubtful and early case, Wood's lamp is great help in diagnosis.
- 3) The lesions are present at birth, are usually confined to the head and trunk and rarely show a hyperpigmented border.
- 4) Careful examination of the texture of the depigmented skin should exclude lichen sclerosis and scleroderma.

- 5) Post-inflammatory leucoderma, which is frequent in the darker races, shows an irregular mottling of hyper pigmented and hypopigmented blotches.
- 6) Hypomelanosis of the affected skin is commonly seen in pityriasis alba, producing slightly scaly areas with rather ill defined edges on children's faces.
- 7) Hypopigmented slightly scaly macules are seen in pityriasis versicolor.
- 8) Vitiligo areas are milky white while others lack this milky white coloration.
  - ♣ Stationary patches are well-defined and have hyperpigmented borders.
  - ♣ Sensations are normal, so is texture unless the patches have been irritated with treatment.
  - ♣ Absence of scaling, crusting and itching help to eliminate seborrheoids and pityriasis versicolor.
  - ♣ These areas often fluoresce a golden yellow when examined under a Wood's lamp. The hypomelanotic macules in leprosy are anaesthetic.
  - ♣ Leucodermoid is a term coined to describe Leucoderma-like lesions at an early stage when the features are not definite and observation is necessary to come to a conclusion.
  - ♣ Examination of the skin in long wave UVR helps distinguish whether there is total depigmentation (as in Vitiligo) or not. It may also detect areas of depigmentation not easily seen in ordinary daylight, as well as detecting a lemon-yellow fluorescence seen in some cases of pityriasis versicolor.

**Causes of localised Hypopigmentation :**

Vitiligo	Destruction of melanocytes; common; acquired, multiple sharply defined nonpigmented patches are seen.
Pityriasis versicolor	Superficial fungal infection leading to disturbance in pigment production common multiple pale scaling patches on trunk.
Pityriasis alba	Mild patchy eczema of the face in children causing a disturbance in pigment production.
Leprosy(Hansen disease)	One or several paler macules on trunk or limbs that are hypoaesthetic.
White macules of tuberous sclerosis	Uncommon development of anomaly affecting CNS connective tissue and skin; several "maple leaf shaped hypopigmented macules.

## **EVALUATION OF THE DISSERTATION TOPIC**

### **MATERIALS AND METHODS**

The clinical study on Suvetha kuttam was carried out with the out patients in the post graduate department of Noi Naadal at Govt. Siddha Medical College, Palayamkottai.

Twenty cases with clinical signs and symptoms of Suvetha kuttam of both sex of all different ages were related and studied under the guidance of the faculties of post graduate department of Noi Naadal.

#### **Selection of the patients**

The clinical study was done in 50 cases among them 20 cases were selected on the basis of clinical symptoms were indicated in siddha text.

#### **Clinical features of Suvetha Kuttam**

1. White patches present in area of the body.
2. Grey hair present in the affected area.
3. The patches present like to burn scar.

#### **Diagnosis**

The patients for clinical trials were thoroughly enquired and examined according to siddha methodology as per the following proforma.

- Name, age, sex, occupation were enquired and noted.
- Since diet is a major cause dietary habits were noted.
- Family history, past history also were noted.
- Personal history, allergic history, particulars of lesions were also noted.
- In all the cases, the following routine laboratory investigation were noted in Government Siddha Medical College, Palayamottai.

**Siddha parameters**

Nilam,  
Kalam,  
Poriylaridhal,  
Pulanarithal  
Vinaadhal  
Mukutra Nilagal,  
Udal thathukkal and  
Envagai thervugal (Neerkuri, Neikuri)

**Laboratory investigation****Blood**

1. Total W.B.C. count
2. Differential count
3. Haemoglobin estimation

**Biochemistry**

1. Blood Sugar
2. Blood Urea
3. Serum Cholesterol

**Urine**

1. Albumin
2. Sugar
3. Deposit

**Motion**

1. Ova
2. Cyst
3. Occult blood

**Other investigation**

Skin Biopsy



## **OBSERVATION AND RESULTS**

Results were observed with respect of the following aspects.

1. Sex distribution
2. Age distribution
3. Kaalam distribution
4. Occupational status
5. Seasonal variations
6. Thina reference
7. Diet habit
8. Socio economic status
9. Etiological factors
10. Family history
11. Mukkutra Nilai
12. Udal kattugal reference
13. Ennvagai thervugal
14. Neerkuri, Neikuri reference
15. Site of Lesion
16. Laboratory findings

### 1. Sex distribution

Sl.No	Sex	No.of cases	Percentage
1	Male	10	50%
2	Female	10	50%

20 patients were selected, out of these, ten patients (50%) were males and ten patients (50%) were females. Males and females were equally affected.

### 2. Age distribution

Sl.No	Age	No.of cases	Percentage
1	11 – 20	2	10%
2	21 - 30	2	10%
3	31 – 40	3	15%
4	41 – 50	4	20%
5	51 – 60	5	25%
6	61 – 70	4	20%

Out of 20 cases, most of the patients were found in the age group between 31 – 70 years

### 3. Kaalam distribution

Sl.No	Kaalam	No.of cases	Percentage
1	Kaba Kaalam (1-33 years)	4	20%
2	Pitha Kaalam (33-66 years)	11	55%
3	Vatha Kaalam (66-100years)	5	25%

Out of the 20 cases most of them were in Pitha Kaalam, next in vatha kaalam.

#### 4. Occupational Status

Sl.No	Occupational	No.of cases	Percentage
1	Farmers	4	20%
2	General Merchant	3	15%
3	Coolies	8	40%
4	Home makers	3	15%
5	Driver	2	10%

Occupational history is closely related with suvetha kuttam. It is illustrated as follows.

#### 5. Seasonal Variations

Sl.No	Paruva Kaalam	No.of cases	Percentage
1	Kaar Kaalam	4	20%
2	Koothir Kaalam	5	25%
5	Elavenil Kaalam	3	15%
6	Muthuvenil Kaalam	8	40%

Out of 20 cases, most of the patients were in muthevenil kaalam.

#### 6. Thina Reference

Sl.No	Paruva Kaalam	No.of cases	Percentage
1	Kurinji	1	5%
2	Marutham	15	75%
3	Neithal	4	15%

Out of 20 patients, most of the patients were in Marutham.

## 7. Diet Habits

Sl.No	Diet Habit	No.of cases	Percentage
1	Vegetarian	5	25%
2	Mixed	15	75%

Out of 20 patients, 15 patients have mixed diet.

## 8. Socio Economic Status

Sl.No	Socio Economic Status	No.of cases	Percentage
1	Poor	17	85%
2	Middle	3	15%

Out of 20 patients, 17 patients poor socio economic status.

## 9. Etiological Factors

Sl.No	Etiology	No.of cases	Percentage
1	Occupational Status	4	20%
2	Hereditary	4	20%
3	Nutritional deficiency	9	45%
4	Chronic irritant	2	10%
5	Drug	1	5%

Out of 20 cases, 9 cases due to nutritional deficiency.

## 10. Family History

Sl.No	Family History	No.of cases	Percentage
1	Positive	4	20%
2	Negative	16	80%

Out of 20 cases, 16 cases have negative family history.

## 11. Distribution of Mukkutram

### a) Vali Reference

Sl.No	Classification of Vali	No.of cases	Percentage
1	Piranan	10	50%
2	Abanan	16	80%
3	Viyanan	20	100%
4	Udhanan	20	100%
5	Samanan	20	100%
6	Nagan	-	-
7	Koorman	8	40%
8	Kirukaran	10	50%
9	Devathathan	20	100%
10	Dananjayan	-	-

All the vayus except nagan were affected in this disease. Uthanan, Samanan, Viyanan, Devathathan were affected in all 20 cases.

### b) Azhal Reference

Sl.No	Classification of Azhal	No.of cases	Percentage
1	Anar pitham	12	60%
2	Ranjagam	16	80%
3	Sathagam	10	50%
4	Alosagam	8	40%
5	Prasagam	20	100%

All the types of azhal were affected in this diseases. Prasagam was affected in 20 cases, Ranjagapitham was affected in 16 cases

### c) Kabam Reference

Sl.No	Classification of Kabha	No.of cases	Percentage
1	Avalambagam	18	90%
2	Kilethagam	18	90%
3	Pothagam	10	50%
4	Tharpagam	-	-
5	Santhigam	-	-

Avalambagam, kilethagam, pothagam were affected in this disease.  
Out 20 cases avalambagam and kilethagam were affected in 18 cases.

### 12. Udal Kattugal

Sl.No	Udal Kattugal	No.of cases	Percentage
1	Saaram	20	100%
2	Senneer	20	100%
3	Oon	20	100%
4	Kozhuppu	16	80%
5	Enbu	16	80%
6	Moolai	14	70%
7	Sukkilam/Suronitham	-	-

All the udal kattugal were affected in these disease except Sukkilam/suronitham. Saaram, Seneer, Oon were affected in 20 cases

### 13. Envagai thervugal

Sl.No	Envagi Thervugal	No.of cases	Percentage
1	Naa	14	70%
2	Niram	20	100%
3	Mozhi	-	-
4	Vizhi	14	70%
5	Sparisam	-	-
6	Malam	4	20%
7	Moothiram	-	-
8	Naadi	20	100%

Out of 20 cases, Niram and Naadi were affected in twenty cases, Naa was affected in 14 cases,

### 14. Neerkuri, Neikuri reference

Sl.No	Type of test	No.of cases	Percentage
1	Neerkuri “Vaikkol Niram”	20	100%
2	Neikuri 1. Muthothu nitral	20	100%

In all 20 cases, neikuri showed Muthothu nitral and melaparava.

### 15. Site of lesion

Sl.No	Result	No of cases	Percentage
1	Head, face and Neck	8	40%
2	Trunk	10	50%
3	Upper limbs	8	40%
4	Lower limbs	14	70%
5	Both upper and lower limb	6	30%
6	Gentila area	2	10%

The lesion present in any area of the body commonly present in the Upper limb, lower limb, trunk and face.

**TABLE SHOWS LABORATORY INVESTIGATION REPORT OF 20 O.P CASES**

Sl. No	O.P. No	Hametological report							Biochemical Report				Urine Analysis			Stool Examination	
		T.C Cells cu.mm	DC %			ESR		Hb %	B.S (R) mgs%	B.U mgs%	S.C gs%	VDRL	Alb	Sug	Dep	Ova	Cyst
			P%	L%	E%	½ hr/ mm	1hr/ mm										
1	32713	9200	64	32	4	2	4	78	100	25	150	- ve	Nil	Nil	NAD	Nil	Nil
2	36981	7000	55	40	5	2	8	74	140	20	149	- ve	Nil	Nil	NAD	Nil	Nil
3	37105	8800	58	38	4	2	4	78	130	25	169	- ve	Nil	Nil	NAD	Nil	Nil
4	37281	8600	60	35	5	2	4	68	170	30	167	- ve	Nil	Nil	NAD	Nil	Nil
5	40205	8700	55	40	5	10	22	60	140	20	175	- ve	Nil	Nil	NAD	Nil	Nil
6	40322	9000	64	34	2	20	40	61	110	22	149	- ve	Nil	Nil	NAD	Nil	Nil
7	49203	8700	62	35	3	4	8	64	108	18	174	- ve	Nil	Nil	NAD	Nil	Nil
8	49209	9200	60	38	2	16	32	60	122	19	162	- ve	Nil	Nil	NAD	Nil	Nil
9	49284	9400	65	65	30	5	10	66	130	22	150	- ve	Nil	Nil	NAD	Nil	Nil
10	49531	9000	56	40	4	15	30	62	128	24	163	- ve	Nil	Nil	NAD	Nil	Nil
11	49532	9200	64	32	4	18	36	58	130	28	140	- ve	Nil	Nil	NAD	Nil	Nil
12	49664	8900	60	37	3	7	14	70	136	30	152	- ve	Nil	Nil	NAD	Nil	Nil
13	50205	9200	56	42	2	20	40	58	120	30	150	- ve	Nil	Nil	NAD	Nil	Nil
14	51043	9300	60	32	8	21	28	56	140	29	155	- ve	Nil	Nil	NAD	Nil	Nil
15	62374	9200	70	25	5	14	28	52	132	22	162	- ve	Nil	Nil	NAD	Nil	Nil
16	62378	9400	66	28	6	18	34	62	136	26	140	- ve	Nil	Nil	NAD	Nil	Nil
17	51306	8100	62	36	2	6	12	68	138	28	153	- ve	Nil	Nil	NAD	Nil	Nil
18	66685	9700	64	34	2	20	40	48	128	30	150	- ve	Nil	Nil	NAD	Nil	Nil
19	67128	9500	55	40	5	10	22	60	130	28	164	- ve	Nil	Nil	NAD	Nil	Nil
20	69719	8200	16	32	8	10	20	74	126	30	152	- ve	Nil	Nil	NAD	Nil	Nil

Tc – Total Count      DC – Differential Count      ESR – Erthrocyte Sedimenation Rate      Hb - Heamoglobin

P – Polymorph      L – Lymphocyte      E – Eosinophils      BS – Blood Sugar      BU – Blood Urea      SC – Serum Cholesterol



## **DISCUSSION**

**Suvetha kuttam** is one of the eighteen types of kuttam described by **saint Yugi**.

In siddha literature, it is an acquired depigmented condition of the skin characterised by the appearance of the ivory white patches on the skin which is the main clinical feature.

The classifications, aetiology and clinical features are discussed in many siddha literatures. Author collected these largely from, yugi vaidhya chinthamani, siddha maruthuvam sirappu, thanvanthri vaidhyam, pothu maruthuvam and aruvai maruthuvam.

The clinical study on the all selected twenty cases were undergone investigations by both siddha as well as modern allied parameters.

### **I .Interpretation of clinical history**

#### **1. Sex**

Out of 20 cases, (50%) were males and (50%) were females. Males and females were equally affected in this disease.

#### **2. Age group**

65% of patients affected in the age group 40 –70 years

#### **3. Socio – Economic status:**

Out of 20 patients, 85 % of patients were from Poor socio economic status.

Nutritional defects also one of the causes of suvetha kuttam. Diet with rich nutrients is closely binds to earning of an individual income.

#### **4. Diet**

90% of cases were diet. 15% of cases were vegetarian.

#### **5. Seasonal variations**

40% cases were in Muthuvenil kaalam

25% cases were in Kothir kaalam,

20% cases were in Kaarkaalam,

15% cases were in Elavenil kaalam,

Most of the patients were in Muthuvenil kaalam.

#### **6. Thinai:**

75% of patients were belonging to maruthanilam.

In siddha literature reveal that maruthanilam is as place that can be regarded as “disease free zone” and cures all the disease. But various environmental changes in the life style in marutham, disease venpadai occurs irrespective of any place. Maximum patients came from in and around Tirunelveli which belongs to maruthanilam.

#### **7. Clinical features**

All the patients depicted the clinical features mentioned in the poem “Suvetha Kuttam” in the text book of Yugi vaithya chinthamani.

## **II. INTERPRETATION OF SIDDHA PARAMETERS**

### **1. Interpretation of Mukkutra Nilakkal:**

#### **i. Vali**

Viyanan, Udhanan, were affected in 100% of cases.

Samanan, Devathathan were affected in 100% of cases.

Abanan was affected in 80% of cases.

Pranan was affected in 50% cases

Kirugaran was affected in 50% of cases

Koorman was affected in 40% of cases

## **ii. Iyam**

Avalambagam and Kilethagam were affected in 90% of cases.

Pothagam was affected in 50% of cases.

## **iii. Azhal**

Prasagam was affected in 100% of cases.

Ranjagam was affected in 80% of cases.

Anarpitham was affected in 60% of cases.

Sadhagam was affected in 50% of cases

Alosagam was affected in 40% of cases

## **2. Interpretation of Udal Thathukkal**

Saaram, Senner and Oon were affected in 100% of cases

Kozhuppu and Enbu were affected in 80% of cases.

Moolai was affected in 70% of cases.

## **3. Interpretation of Envagai thervugal :**

Naadi was affected in 100% of cases

Iya vali 80% of cases

Valiiyam 20 % of cases

Niram was affected in 100% of cases

Naa was affected 70% of cases

Vizhi was affected in 70% of cases

Malam was affected in 20% of cases

Mozhi was not affected

Sparisam was not affected

Moothiram – Niram – straw colour.

Manam – No abnormal odor

Enjal - No deposition

## **NEIKURI**

Muthothu Nitral in 100% of cases

### **III. INTERPRETATION OF ALLIED PARAMETERS**

Total count WBC	- Normal
Differential count	- Normal
ESR	- Most of the patients had raised ESR
Hb %	- Most of the patients had decreased hemoglobin amount.

### **IV. HIGH LIGHTS OF THE DISSERTATION TOPIC**

The disease affect all age group and both sexes

Nutritional deficiency digestive problem and occupations are the causes for the Suvetha kuttam.

The diseases is characterized by completely depigmented macules and patches of varying size and shape.

Patches present in any area of the body commonly seen in the face, upper limb, lower limb and trunk.

If the lesion present in the lips, palm, anal orifice and genital organs, it is incurable.

Grey hair in affected area is incurable.

All these above symptoms correlate with suvetha kuttam explained by our great siddhar Yugi muni.

## DIFFERENCIAL DIAGNOSIS

<b>Distinguish Features</b>	<b>Veluppudal Noi</b>	<b>Thozhu Noi</b>	<b>Themal</b>	<b>Theekaya Thazhumbu</b>
Age	Congenital present at Birth	Any age	Any age	Accuried any age
Distribution	Complete (or) partial	Any area	Trunk, Neck and face	Any area
Course	Stationary	Progressive	Progressive worse in mansoon and summer	Healing with depigmentation
Hyperipigmentary Border	Nil	Inflammatory	Nil	Present
Heredofamilial	Hereditary	Nil	Nil	Nil
Otherfeature	Hair and eye may be affected	Anesthetic patches, thickned nerves, slit smear and biopsy	Furfuraceous like dandruffy scaling in head, macules and large patches, fungus on microscopic examination	History of burns

## **CONCLUSION**

Identification of disease and its pathogenesis are per requisite for medical practice. A detailed history taking, clinical examinations as per siddha guidelines is necessary to arrive at precise diagnosis.

The study on Suvetha Kuttam was carried out in the dissertation, giving importance to the characteristics of the disease like white color patches present in any area of the body and grey hair in affected areas.

Diagnosis can be carried out by detailed history taking, classical clinical examination of siddha system via Envagaithervugal including Neerkuri, Neikuri, and changes in udal thathukal and mukktam.

This study on Suvedha Kuttam may be correlates with vitiligo which has given relevance to modern clinical entity.

**Case No : 66685**



**Case No : 49209**



**Case No : 66685**



**Case No : 49209**





# **NEIKURI**

**Case No : 49209  
Muthothu Nitral**



**Case No : 66685  
Muthothu Nitral**



**P.G. – NOI NAADAL DEPARTMENT,  
GOVT.SIDDHA MEDICAL COLLEGE, PALAYAMKOTTAI.**

**A Study to Diagnose SUVETHA KUTTAM through Siddha**

**Diagnostic Methodology**

**PROFORMA**

1. Name : \_\_\_\_\_ 6. O.P.No. : \_\_\_\_\_

2. Age : \_\_\_\_\_ 7. I.P. No. : \_\_\_\_\_

3. Sex : \_\_\_\_\_ 8. Bed No. : \_\_\_\_\_

4. Occupation \_\_\_\_\_ 9. S.No. : \_\_\_\_\_

5. Income \_\_\_\_\_ / month 10. Date : \_\_\_\_\_

11. Nationality : \_\_\_\_\_ 12. Religion : \_\_\_\_\_

13. Address : \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Signature of the Department  
Faculty**

14. Complaints and duration:

\_\_\_\_\_

\_\_\_\_\_

15. History of Present Illness:

\_\_\_\_\_

\_\_\_\_\_

16. Past History:

\_\_\_\_\_

\_\_\_\_\_

17. Family History:

\_\_\_\_\_

\_\_\_\_\_

18. Personal History

\_\_\_\_\_

19. Allergic History

\_\_\_\_\_

\_\_\_\_\_

Habits	1.Yes	2.No
20. Betelnut chewer :	<input type="checkbox"/>	<input type="checkbox"/>
21. Tea :	<input type="checkbox"/>	<input type="checkbox"/>
22. Coffee :	<input type="checkbox"/>	<input type="checkbox"/>
23. Milk :	<input type="checkbox"/>	<input type="checkbox"/>
24. Smoking :	<input type="checkbox"/>	<input type="checkbox"/>
25. Alcohol/ Drug :	<input type="checkbox"/>	<input type="checkbox"/>
26. Food habits :	V <input type="checkbox"/> NV <input type="checkbox"/> M <input type="checkbox"/>	<input type="checkbox"/>

### GENERAL ETIOLOGY FOR SUVETHA KUTTAM

#### NUTRITIONAL

	1. Yes	2.No
27. Defects in diet	<input type="checkbox"/>	<input type="checkbox"/>
(i) Copper deficiency	<input type="checkbox"/>	<input type="checkbox"/>
(ii) Protein deficiency	<input type="checkbox"/>	<input type="checkbox"/>
(iii) Vitamin deficiency	<input type="checkbox"/>	<input type="checkbox"/>
28. Digestive upsets like		
(i) Amoebiasis	<input type="checkbox"/>	<input type="checkbox"/>
(ii) Helminthes	<input type="checkbox"/>	<input type="checkbox"/>
(iii) Chronic diarrhea	<input type="checkbox"/>	<input type="checkbox"/>
(iv) Dysentery etc.	<input type="checkbox"/>	<input type="checkbox"/>
29. Pernicious Anaemia	<input type="checkbox"/>	<input type="checkbox"/>

#### ENDOCRINES

30. Thyrotoxicosis	<input type="checkbox"/>	<input type="checkbox"/>
31. Diabetes mellitus	<input type="checkbox"/>	<input type="checkbox"/>

#### TROPHONEUROSIS AND AUTONOMIC IMBALANCE

32. Emotional stress and strain	<input type="checkbox"/>	<input type="checkbox"/>
33. Physical illness	<input type="checkbox"/>	<input type="checkbox"/>
34. Sun burn	<input type="checkbox"/>	<input type="checkbox"/>

#### INFECTIONS AND TOXIC PRODUCTS

	1. Yes	2. No
35. Enteric Fever	<input type="checkbox"/>	<input type="checkbox"/>
36. Focal sepsis	<input type="checkbox"/>	<input type="checkbox"/>

**CHRONIC IRRITATION****1. Yes****2. No**

37. Rubber

☐☐

38. Leather

☐☐

39. Clothes

☐☐**DRUGS AND CHEMICALS****1. Yes****2. No**

40. Quinones

☐☐

41. Amylphenol

☐☐

42. Broad spectrum antibiotics

☐☐

43. Beta blockers

☐☐

44. Chloroquine

☐☐**45. DEFECT IN MELANIN****PIGMENT SYNTHESIS**☐☐**SEXUAL TRANSMITTED DISEASE**

46. Syphills

☐☐**47. LEPROSY**☐☐**48. IDIOPATHIC**☐☐**GENERAL EXAMINATION**

49. Consciousness : \_\_\_\_\_

50. Nourishment : \_\_\_\_\_

51. Posture : \_\_\_\_\_

52. Skin changes : \_\_\_\_\_

53. Weight :  kg54. Temperature :  °F .55. Pulse rate :  / minute56. Heart rate :  / minute57. Respiratory rate :  / minute58. Blood pressure :  /  mm.Hg**1. Present****2. Absent**59. Pallor : ☐ ☐ \_\_\_\_\_60. Jaundice : ☐ ☐ \_\_\_\_\_

61. Cyanosis	:	<input type="checkbox"/>	<input type="checkbox"/>	_____
62. Clubbing	:	<input type="checkbox"/>	<input type="checkbox"/>	_____
63. Lymphadenopathy	:	<input type="checkbox"/>	<input type="checkbox"/>	_____
64. Pedal edema	:	<input type="checkbox"/>	<input type="checkbox"/>	_____
65. Generalised Oedema	:	<input type="checkbox"/>	<input type="checkbox"/>	_____
66. Jugular venous pulsation	:	<input type="checkbox"/>	<input type="checkbox"/>	_____
67. Koilonychia	:	<input type="checkbox"/>	<input type="checkbox"/>	_____
68. Abdominal distension	:	<input type="checkbox"/>	<input type="checkbox"/>	_____

<b>VITAL ORGANS EXAMINATION</b>	<b>1. Normal</b>	<b>2. Affected</b>
---------------------------------	------------------	--------------------

69. Stomach	<input type="checkbox"/>	<input type="checkbox"/>	_____
70. Liver	<input type="checkbox"/>	<input type="checkbox"/>	_____
71. Spleen	<input type="checkbox"/>	<input type="checkbox"/>	_____
72. Lungs	<input type="checkbox"/>	<input type="checkbox"/>	_____
73. Heart	<input type="checkbox"/>	<input type="checkbox"/>	_____
74. Kidney	<input type="checkbox"/>	<input type="checkbox"/>	_____
75. Brain	<input type="checkbox"/>	<input type="checkbox"/>	_____

### CLINICAL EXAMINATION IN AFFECTED AREA OF THE SKIN

#### I. Paarvai Thervu

76. Site	_____		
77. Size	0.1-1cm _____	1-2 cm _____	2-3cm _____
	4-5cm _____	> 5cm _____	
78. Shape	Regular <input type="checkbox"/>	Irregular <input type="checkbox"/>	
79. Border	Elevated <input type="checkbox"/>	Not Elevated <input type="checkbox"/>	
	Ill-defined <input type="checkbox"/>	Well defined <input type="checkbox"/>	Hyper pigmented <input type="checkbox"/>
80. Colour of the lesion	Grey <input type="checkbox"/>	Pale white <input type="checkbox"/>	Pink <input type="checkbox"/>

	1. Present	2. Absent
81. Scaling	<input type="checkbox"/>	<input type="checkbox"/>
82. Crusting	<input type="checkbox"/>	<input type="checkbox"/>
83. Thickened or Lichenified	<input type="checkbox"/>	<input type="checkbox"/>
84. Excoriated	<input type="checkbox"/>	<input type="checkbox"/>
85. Exudation	<input type="checkbox"/>	<input type="checkbox"/>
86. Maceration	<input type="checkbox"/>	<input type="checkbox"/>
87. Inflammation	<input type="checkbox"/>	<input type="checkbox"/>
88. Central area	Clear <input type="checkbox"/>	Not Clear <input type="checkbox"/>

## II. THODU UNARVU

	1. Present	2. Absent
89. Sensation	<input type="checkbox"/>	<input type="checkbox"/>

## SIDDHA SYSTEM OF EXAMINAION ENNVAGAI THERVUKAL

### NAA

#### 90. Maa Padinthiruthal

1. Present <input type="checkbox"/>	2. Absent <input type="checkbox"/>	_____
-------------------------------------	------------------------------------	-------

#### 91. Niram

1. Karuppu <input type="checkbox"/>	2. Manjal <input type="checkbox"/>	
3. Velluppu <input type="checkbox"/>	4. Others <input type="checkbox"/>	_____

#### 92. Suvai

1. Pulippu <input type="checkbox"/>	2. Kaippu <input type="checkbox"/>	3. Inippu <input type="checkbox"/>
4. Thuvarppu <input type="checkbox"/>	5. Kaarppu <input type="checkbox"/>	6. Uppu <input type="checkbox"/>

#### 93. Vedippu

1. Present <input type="checkbox"/>	2. Absent <input type="checkbox"/>	_____
-------------------------------------	------------------------------------	-------

#### 94. Vai neer ooral

1. Normal <input type="checkbox"/>	2. Excess <input type="checkbox"/>
3. Scanty <input type="checkbox"/>	4. Absent <input type="checkbox"/>

#### 95. NIRAM

1. Karuppu <input type="checkbox"/>	2. Manjal <input type="checkbox"/>	
3. Velluppu <input type="checkbox"/>	4. Maaniram <input type="checkbox"/>	_____

#### 96. MOZHI

1. Sama oli <input type="checkbox"/>	2. Urattha oli <input type="checkbox"/>	3. Thaazhntha oli <input type="checkbox"/>
--------------------------------------	-----------------------------------------	--------------------------------------------

**VIZHI**

97. Niram

1. Karuppu

☐

2. Manjal

☐

3. Sivappu

☐

4. Velluppu

☐

---

98. Kanneer

1. Normal

☐

2. Abnormal

☐

---

99. Erichchal

1. Present

☐

2. Absent

☐

---

100. Peelai seruthal

1. Present

☐

2. Absent

☐

---

**MEI KURI**

101. Veppam

1. Mithaveppam

☐

2. Miguveppam

☐

3. Thatpam

☐

102. Viyarvai

1. Normal

☐

2. Increased

☐

3. Reduced

☐

---

103. Thodu vali

1. Present

☐

2. Absent

☐

---

**MALAM**

104. Niram

1. Karuppu

☐

2. Manjal

☐

3. Sivappu

☐

4. Velluppu

☐

---

105. Thanmai

1. Elagal

☐

2. Erugal

☐

3. Thin

☐

4. Bulky

☐

106. Alavu

1. Normal

☐

2. Increased

☐

3. Decreased

☐

107. Kalichchal

1. Present

☐

2. Absent

☐

---

108. Seetham

1. Present

☐

2. Absent

☐

---

109. Vemmai

1. Present

☐

2. Absent

☐

---

**MOOTHIRAM (Siruneer)****NEER KURI**

110. Niram

1. Venmai ☐ 2. Manjal ☐ 3. Sivappu ☐ \_\_\_\_\_

111. Manam

1. Present ☐ 2. Absent ☐ \_\_\_\_\_

112. Nurai

1. Normal ☐ 2. Increased ☐ 3. Reduced ☐

113. Edai(Ganam)

1. Normal ☐ 2. Increased ☐ 3. Reduced ☐ \_\_\_\_\_

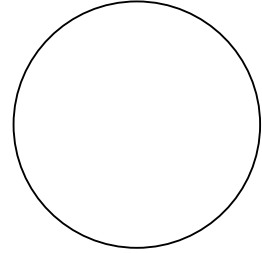
114. Enjal (Alavu)

1. Normal ☐ 2. Increased ☐ 3. Reduced ☐4. Thadavai 

Day	Night	Total
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

 \_\_\_\_\_115. **NEI KURI**

1. Aravam	<input type="checkbox"/>	2. Mothiram	<input type="checkbox"/>
3. Muthu	<input type="checkbox"/>	4. Aravil Mothiram	<input type="checkbox"/>
5. Aravil Muthu	<input type="checkbox"/>	6. Mothirathil Aravam	<input type="checkbox"/>
7. Mothirathil Muthu	<input type="checkbox"/>	8. Muthil Aravam	<input type="checkbox"/>
9. Muthil Mothiram	<input type="checkbox"/>	10. Asaathiyam	<input type="checkbox"/>
11. Mellena paraval	<input type="checkbox"/>		

**NAADI(KAI KURI)****II. Naadi Nithanam**

116. Kaalam

1. Kaarkaalam	<input type="checkbox"/>	2. Koothirkaalam	<input type="checkbox"/>
3. Munpanikaalam	<input type="checkbox"/>	4. Pinpanikaalam	<input type="checkbox"/>
5. Ilavenirkaalam	<input type="checkbox"/>	6. Muthuvenirkaalam	<input type="checkbox"/>

117. Desam

1. Kulir ☐ 2. Veppam ☐ \_\_\_\_\_

118. Vayathu

1. 1-33yrs ☐ 2. 34-66yrs ☐ 3. 67-100yrs ☐



119. Udal Vanmai

1. Eyyalbu ☐ 2. Valivu ☐ 3. Melivu ☐

120. Naadiyin Vanmai

1. Vanmai ☐ 2. Menmai ☐

121. Naadiyin Panbu

1. Thannadai ☐ 2. Puranadai ☐ 3. Illaitthal ☐  
 4. Kathithal ☐ 5. Kuthithal ☐ 6. Thullal ☐  
 7. Azhutthal ☐ 8. Padutthal ☐ 9. Kalatthal ☐  
 10. Munnookku ☐ 11. Pinnokku ☐ 12. Suzhalal ☐  
 13. Pakkamokku ☐

122. Naadi Nadai

1. Vali ☐ 2. Azhal ☐ 3. Iyam ☐  
 4. Valiazhal ☐ 5. Azhalvali ☐ 6. Iyavali ☐  
 7. Valiiyam ☐ 8. Azhaliyam ☐ 9. Iyaazhal ☐  
 10. Sanni Increased ☐ Decreased ☐ \_\_\_\_\_

123. MANIKKADAI NOOL (Viral Kadai Alavu)

IYMPORIGAL / IYMPULANGAL 1. Normal

2. Affected

124. Mei / Ooru	<input type="checkbox"/>	<input type="checkbox"/> _____
125. Vaai / Suvai	<input type="checkbox"/>	<input type="checkbox"/> _____
126. Kan / Parvai	<input type="checkbox"/>	<input type="checkbox"/> _____
127. Mookku / Naatrum	<input type="checkbox"/>	<input type="checkbox"/> _____
128. Sevi / Osai	<input type="checkbox"/>	<input type="checkbox"/> _____

KANMENTHIRIYANGAL / KANMAVIDAYANGAL

1. Normal

2. Affected

129. Kai / Thaanam	<input type="checkbox"/>	<input type="checkbox"/> _____
130. Kaal / Gamanam	<input type="checkbox"/>	<input type="checkbox"/> _____
131. Vaai / Vasanam	<input type="checkbox"/>	<input type="checkbox"/> _____
132. Eruvaai / Visarkkam	<input type="checkbox"/>	<input type="checkbox"/> _____
133. Karuvaai / Aanandham	<input type="checkbox"/>	<input type="checkbox"/> _____

**134. YAAKAI**

1. Vali

☐

2. Azhal

☐

3. Iyam

☐

4. Valiazhal

☐

5. Azhalvali

☐

6. Iyavali

☐

7. Valiiyam

☐

8. Azhaliyam

☐

9. Iyaazhal

☐**135. GUNAM**

1. Sathuva Gunam

☐

2. Rasatha Gunam

☐

3. Thamasa Gunam

☐**UYIR THATHUKKAL****I. VALI****1. Normal****2. Affected**

136. Uyirkkaal (Praanam)

☐☐

137. Keelnokkukkaal (Abaanam)

☐☐

138. Melnokkukkaal (Udhaanan)

☐☐

139. Paravukaal (Viyaanan)

☐☐

140. Nadukkaal (Samaanan)

☐☐

141. Naahan

☐☐

142. Koorman

☐☐

143. Kirukaran

☐☐

144. Devathathan

☐☐

145. Dhananjeyan

☐☐**II. AZHAL****1. Normal****2. Affected**

146. Aakkanal (Anarpitham)

☐☐

147. Olloliththee (Prasakapitham)

☐☐

148. Vannayeri (Ranjakapitham)

☐☐

149. Nokkazhal (Aalosakapitham)

☐☐

150. Aatralangi (Saathakapitham)

☐☐**III. IYAM****1. Normal****2. Affected**

151. Aliiyam (Avalambagam)

☐☐

152. Neerppiiyam (Kilethagam)

☐☐

153. Suvaikaaniyam (Pothagam)

☐☐

154. Niraivuiyam (Tharpagam)

☐☐

\_\_\_\_\_

155. Ontriiyam (Santhigam)

☐☐

\_\_\_\_\_

**UDAL THATHUKKAL**

**1. Normal**

**2. Affected**

156. Saaram

☐☐

\_\_\_\_\_

157. Senneer

☐☐

\_\_\_\_\_

158. Oon

☐☐

\_\_\_\_\_

159. Kozhuppu

☐☐

\_\_\_\_\_

160. Enbu

☐☐

\_\_\_\_\_

161. Moolai

☐☐

\_\_\_\_\_

162. Suronitham/Sukkilam

☐☐

\_\_\_\_\_

**MUKKUTRAM MIGU GUNAM**

**I.Vali Migu Gunam**

**1. Present**

**2. Absent**

163. Emaciation

☐☐

164. Blackish colouration of body

☐☐

165. Desire to take hot food

☐☐

166. Tremors

☐☐

167. Abdominal distension

☐☐

168. Insomnia

☐☐

169. Constipation

☐☐

170. Weakness

☐☐

171. Weakness of sense organs

☐☐

172. Giddiness

☐☐

173. Sluggishness

☐☐

**II. Azhal Migu Gunam****1. Present****2. Absent**

174. Yellowish discolouration of the skin

☐☐

175. Yellowish discolouration of the eye

☐☐

176. Yellowish discolouration of urine

☐☐

177. Yellowish discolouration of faeces

☐☐

178. Increased appetite

☐☐

179. Burning sensation in the body

☐☐

180. Insomnia

☐☐**III. Iyam Migu Gunam****1. Present****2. Absent**

181. Excessive salivation

☐☐

182. Reduced appetite

☐☐

183. Heaviness of the body

☐☐

184. Whiteness of the body

☐☐

185. Chillness of the body

☐☐

186. Cough

☐☐

187. Increased sleep

☐☐

188. Eraippu (Dyspnoea)

☐☐

189. Sluggishness

☐☐**190. STATE OF MUKKUTRAM**

1.Vali

☐

2. Azhal

☐

3. Iyam

☐

---

**191. NOI UTRA KAALAM**

1. Kaarkaalam

☐

2. Koothirkaalam

☐

3. Munpanikaalam

☐

4. Pinpanikaalam

☐

5. Ilavenirkaalam

☐

6. Muthuvenirkaalam

☐

**192. NOI UTRA NILAM**

1. Kurinji	<input type="text"/>	2. Mullai	<input type="text"/>	3. Marutham	<input type="text"/>
4. Neithal	<input type="text"/>	5. Paalai	<input type="text"/>		
193. Date of Birth	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
194. Time of Birth	<input type="text"/> am / pm				
195. Place of Birth	<input type="text"/>				
196. Prinatha Thinai	<input type="text"/>				

**197. NATCHATHIRAM**

1. Aswini	<input type="text"/>	2. Barani	<input type="text"/>	3. Karthikai	<input type="text"/>
4. Rohini	<input type="text"/>	5. Mirugaseeridam	<input type="text"/>	6. Thiruvathiyai	<input type="text"/>
7. Punarpoosam	<input type="text"/>	8. Poosam	<input type="text"/>	9. Aayilyam	<input type="text"/>
10. Makam	<input type="text"/>	11. Pooram	<input type="text"/>	12. Uthiram	<input type="text"/>
13. Astham	<input type="text"/>	14. Chithirai	<input type="text"/>	15. Swathi	<input type="text"/>
16. Visakam	<input type="text"/>	17. Anusam	<input type="text"/>	18. Kettai	<input type="text"/>
19. Moolam	<input type="text"/>	20. Poradam	<input type="text"/>	21. Utthiradam	<input type="text"/>
22. Thiruvonam	<input type="text"/>	23. Avittam	<input type="text"/>	4. Sadayam	<input type="text"/>
25. Pooratathi	<input type="text"/>	26. Utthirattathi	<input type="text"/>	27. Revathi	<input type="text"/>
28. Not Known	<input type="text"/>				

**198. Paadham**

1. I. Paadham	<input type="text"/>	2. II. Paadham	<input type="text"/>	3. III. Paadham	<input type="text"/>	4. IV.	<input type="text"/>
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Paadham

**199. RAASI**

1. Mesam	<input type="text"/>	2. Rishabam	<input type="text"/>	3. Mithunam	<input type="text"/>
4. Kataham	<input type="text"/>	5. Simmam	<input type="text"/>	6. Kanni	<input type="text"/>
7. Thulaam	<input type="text"/>	8. Viruchiham	<input type="text"/>	9. Thanusu	<input type="text"/>
10. Maharam	<input type="text"/>	11. Kumbam	<input type="text"/>	12. Meenam	<input type="text"/>
13. Not Known	<input type="text"/>				

## INVESTIGATION

### BLOOD

200. TC (Cells/cumm)	:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
201. DC (%)	:	1.P <input type="text"/> <input type="text"/> 2.L <input type="text"/> <input type="text"/> 3.E <input type="text"/> <input type="text"/> 4.B <input type="text"/> <input type="text"/> 5.M <input type="text"/> <input type="text"/>
202. Hb (gms%)	:	<input type="text"/> <input type="text"/> <input type="text"/>
203. MCV(fl)	:	<input type="text"/> <input type="text"/> <input type="text"/>
204. PCV	:	<input type="text"/> <input type="text"/> <input type="text"/>
205. MCHC (g/dl)	:	<input type="text"/> <input type="text"/> <input type="text"/>
206. E.S.R. (mm/hr)	:	1.1/2hr <input type="text"/> <input type="text"/> 2.1hr <input type="text"/> <input type="text"/>
207. Blood Sugar (R) (mgs%)	:	<input type="text"/> <input type="text"/> <input type="text"/>
208. Blood Urea (mgs%)	:	<input type="text"/> <input type="text"/>
209. Serum Creatinine (mgs%)	:	<input type="text"/> <input type="text"/> <input type="text"/>
210. Serum Iron ( $\mu$ g/dl)	:	<input type="text"/> <input type="text"/> <input type="text"/>
211. Serum Ferritin (ng/ml)	:	<input type="text"/> <input type="text"/> <input type="text"/>
212. Serum Cholesterol(mg%)	:	<input type="text"/> <input type="text"/> <input type="text"/>
213. Lipid profile		
Triglycerides (mg%)	:	<input type="text"/> <input type="text"/> <input type="text"/>
LDL (mg%)	:	<input type="text"/> <input type="text"/> <input type="text"/>
HDL (mg%)	:	<input type="text"/> <input type="text"/> <input type="text"/>
214. VDRL	:	Positive <input type="checkbox"/> Negative <input type="checkbox"/>

### URINE

215. Albumin	:	0.Nil <input type="checkbox"/> 1. Trace <input type="checkbox"/> 2.+ <input type="checkbox"/> 3. ++ <input type="checkbox"/> 4. +++ <input type="checkbox"/>
216. Sugar	:	0.Nil <input type="checkbox"/> 1. Trace <input type="checkbox"/> 2.+ <input type="checkbox"/> 3. ++ <input type="checkbox"/> 4. +++ <input type="checkbox"/> 5. ++++ <input type="checkbox"/>

<b>Deposits</b>		<b>1. Present</b>	<b>2. Absent</b>
217. Pus cells	:	<input type="checkbox"/>	<input type="checkbox"/> _____
218. Epithelial cells	:	<input type="checkbox"/>	<input type="checkbox"/> _____
219. RBCs	:	<input type="checkbox"/>	<input type="checkbox"/> _____
220. Crystals	:	<input type="checkbox"/>	<input type="checkbox"/> _____

<b>MOTION</b>		<b>1. Present</b>	<b>2. Absent</b>
221. Ova	:	<input type="checkbox"/>	<input type="checkbox"/>
222. Cyst	:	<input type="checkbox"/>	<input type="checkbox"/>
223. Occult Blood	:	<input type="checkbox"/>	<input type="checkbox"/>
224. Wood's Lamp Examination	:		
225. Skin Biopsy	:		

### **CLINICAL SYMPTOMS OF SWETHA KUTTAM**

		<b>1. Present</b>	<b>2. Absent</b>
226. White patches present in Head & Face		<input type="checkbox"/>	<input type="checkbox"/> _____
	Trunk	<input type="checkbox"/>	<input type="checkbox"/> _____
	Upper limb	<input type="checkbox"/>	<input type="checkbox"/> _____
	Lower limb	<input type="checkbox"/>	<input type="checkbox"/> _____
227. White patches present in Lips		<input type="checkbox"/>	<input type="checkbox"/> _____
	Palms	<input type="checkbox"/>	<input type="checkbox"/> _____
	Anus	<input type="checkbox"/>	<input type="checkbox"/> _____
	Genital area	<input type="checkbox"/>	<input type="checkbox"/> _____
228. Grey Hair in patches		<input type="checkbox"/>	<input type="checkbox"/> _____

# PROTOCOL

## “A STUDY TO DIAGNOSE SUVETHA KUTTAM THROUGH SIDDHA DIAGNOSTIC METHODOLOGY ”

BY

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PALAYAMKOTTAI

### 1. BACKGROUND

Kuttam means cutaneous affections in general kuttam is a comprehensive (general) term used for various skin diseases.

Kuttam is classified into 18 types in yugi vaithya sinthamani.

Suvetha Kuttam is a one type of Kuttam. It is also called venpadai, venkkuttam venpulli, venthittu and vendustam.

Suvetha Kuttam is one of the vadha disease in which the vali humour is abnormally changed.

According to the literature yugi vaithya sinthamani, suvetha kuttam has been mentioned as

“தடிப்பாகத் தவளநிறம் போல்வெ ளுத்துச்  
சர்வாங்க மும்வெளுத்தாற் றான்றி ரும்பும்  
மடிப்பாக மயிர்வெளுத்தா லசாத்திய மாகும்  
வரிவுதடு உள்ளங்கை குதங்குய் யந்தான்  
நெடிப்பாக நெருப்புப்பட் டதுபோற் புண்ணாய்  
நிறமிருந்தா லசாத்தியமென்றே யுரைக்க லாகும்  
வெடிப்பாக மேனியெலாம் வெளுத்து வீங்கில்  
வெண்கவேத குட்டமென்றே விளம்ப லாமே”

யூகி வைத்திய சிந்தாமணி

பாடல் எண் - 514



Suvetha Kuttam shows that symptoms such as

Strictly the lesion is greyish white which gradually turns white.

Slowly, if the hair becomes grey, It is incurable

Chronically, If the lesion present in lips, palms, anus and genital area like burns with burning sensation. It is incurable.

Specially, when the paleness spreads all over the body called as vensuvedha Kuttam.

## **2. AIM :**

### **a. PRIMARY AIM**

To diagnose and find out abnormalities of mukkutram and udal thathukkal in suvetha kuttam through Envagaithavu.

### **b. SECONDARY AIM**

To evaluate the etiology and pathology of suvetha kuttam and to analyse the state of curability through Nilam, Kalam, Naadi, Neerkuri, Neikuri, Manikadainool and sothidam.

## **3. POPULATION AND SAMPLE**

Suvetha Kuttam (as explained above under the song) patients satisfying the inclusion and exclusion criteria mentioned below.

The samples consist of suvetha kuttam patients attending the O.P department of Govt.Siddha Medical College, Palayamkottai, Under the guidance of Faculties and Head of the department of post graduate, Noi Naadal Department.

## **4. SAMPLE SIZE**

A sample size of 50 patients will be taken for detailed study.

## **5. INCLUSION CRITERIA**

- (i) Complaints
  - a. White colour patches present in the some parts of the entire body.
  - b. Hypersensation.
  - c. Grey hair in the affected part.
- (ii) Willing to give blood and urine specimen for investigation whenever required.

## **6. EXCLUSION CRITERIA**

- i) Anasthetic patches
- ii) Tinea infestation
- iii) Worm infestation

## **7. CONDUCT**

Suvetha Kuttam patients satisfying the inclusion and exclusion criteria will be included for this study.

Envagaithervu, Nilam, Kalam, Neerkuri and Neikuri of the patients will be noted.

## **8. FORM**

Diagnostic proforma for suvetha kuttam.

## **BIBLIOGRAPHY**

1. Yugi Vaithya Chinthamani
2. Thirumoolar Karukidai Vaithiyam
3. Agathiar Kanma Kandan
4. Agathiyar Kaviyam
5. Agathiyar Vaidhyam
6. Anubava Vaidhya Deva Ragasiam
7. Dhanvanthri vaithyam
8. Guru Naadi
9. Madava Nithanam – Duraisamy Iyengar -1936.
10. Man Murugiam – Kavi rasa panditha rama subramania navalar
11. Para rasa sekaram
12. Pathinen siddhar Naadi Nool
13. Athma Ratchamirtha Sara Sankeram
14. Noi naadi Noi mudal Naadal Part I & II – Dr. Shanmugavelu
15. Siddha Maruthuvam Sirappu – Thiagarajan 1986
16. Siddha maruthuvam Pothu – Kuppusamy Mudaliyar K.N.-1954
17. Siddhar Aruvai maruthuvam – Uthamarayan
18. Thirumoolar Thiru Mandiram
19. Thirumoolar -800
20. T.V. Sambasivam Pillai – Tamil - English Dictionary
21. Tamil Lexicon Dictionary
22. Gray's Anatomy
23. Physiology – Chembulingam
24. Bio-chemistry – Saradha Subramanian
25. Text Book of Pathology – Harshmohan
26. Practice of Dermatology – Behl P.N
27. Common skin diseases –Rox burgh's 15<sup>th</sup> edition.